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Producing Human, Hygenizing Meat: The Material Logic of Animal Oppression in Capitalist Societies

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If I broke down the wall of flesh
and hanging from the hook I smiled
what would he say who is paid to dismember
the stamper of tongues
what label would they put on me
how many organs would they discard
and would the vet think panta rei?

Ivano Ferrari from *The Death-Wife – The Imperfect Beasts*

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CONTENTS

INTRODUCTION

In the days in which I am writing this introduction, my personal filter bubble on Facebook, which mainly comprises variously vegan, antispeciesist, animal advocacy pages and voices of the constellation of the Italian antispeciesist movement, has been overwhelmed by the revival of an old debate: a well-known (in this niche, of course) theorist and activist of intersectional antispeciesism has accused of economic reductionism a well-known (same as above) theorist and activist of Marxist antispeciesism who responded by blaming the former of cultural reductionism. The conclusion of the *querelle* was a lapidary post on which both voices, however, discordantly agree: "You cannot call yourself antispeciesist if you are not at the same time anti-capitalist. That's how it is. End of the story".

I have reported this anecdote because it allows us to immediately catch, in that direct and simple (or perhaps simplistic) way so typical of the discussions on the social networks, the three elements of the background context of the present thesis, i.e. antispeciesism, intersectional perspective, critique of capitalism and how these elements stand in relation to each other within this debate:

1. the welding of capitalism and animal oppression is given for sure;
2. the intersectional perspective on species oppression identifies the matrix of this welding in Western dualistic system of thought. Hence, the accusation of cultural reductionism;
3. the Marxist perspective identifies it in economic exploitation. Hence, the accusation of economic reductionism.

From here, the internally tripartite question which has led this doctoral research arises: is it possible to account for modern animal oppression in

its intersecting with other forms of oppression and in its articulating with capitalist societies, in order to grasp what qualitatively distinguishes it, in a materialist *and* non-reductionist way?

But first things first.

According to a well-established convention the "opening" of the animal question and the popularization of the term "antispeciesism", with the related term "speciesism", coincides with the publication, in 1975, of the book *Animal Liberation*[1] by moral philosopher Peter Singer. In that great season of the so-called "new" social movements (environmentalism, pacifism, feminism) which were the 1970s this groundbreaking book gave solid moral arguments to the emerging animal advocacy movement becoming immediately its manifesto. Thus, the animal question, i.e. the opening of a debate on the legitimacy of the treatment of other animals in modern society, speciesism, i.e. discrimination and oppression on the basis of species (or better said, on the basis of human/animal divide), and antispeciesism, i.e. the fight against such oppression with a view to the liberation of animals, entered to all intents and purposes into the philosophical and public debate.

The attention to the animal and to animals has then quickly extended to all areas of knowledge and humanist research, giving rise to a real "animal turn"[2] and to the emergence of the interdisciplinary field of Animal Studies (AS) or Human Animal Studies (HAS).

On the one hand, this diffusion has been seen positively because it can represent a force for the progressive change of public postures towards other animals. On the other hand, it has been criticized. The inclusion in the institutional channels of the academia, in fact, has undermined the purely socio-political value of the animal question and the critical potential of HAS. In response to this volatilization, since the early 2000s, the field of Critical Animal Studies (CAS) has been established with the aim to take back and prominently engage with the socio-political dimension of the animal question[3].

[1] Peter Singer, *Animal Liberation*, Random House, Manhattan 1995.
[2] Harriet Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age*, Harvard University Press, Cambridge 1987.
[3] Steven Best, "The Rise (and Fall) of Critical Animal Studies", in *Liberazioni. Rivista di critica antispecista* (2013), `http://www.liberazioni.eu/wp-content/uploads/2019/10/Best-TheRiseand-FallofCriticalAnimalStudies.pdf`.

Here we come back to the antispeciesism-intersectionality-critique of capitalism triad of the Facebook debate we have started from. CAS is, in fact, characterized as a distinctly intersectional and sociological oriented approach to address the animal question and human-animal relation, taking a radical antispeciesist stance.

The intersectional perspective – which maintains the multiplicity, simultaneity and connectedness of oppressions and privileges – orients CAS' research to the analysis of the interconnection between speciesism and other forms of oppression (along axes of gender, "race", sexuality, class, etc.,) in order to foster solid alliances and political solidarity between oppressed groups and to eschew single-issue conceptions. However, the intersectionality framework rarely, if never, investigates and explains how and why the interlocking of oppressions happens in the ways that it does. This makes the basis on which such solidarity should be founded uncertain. Hence, appeals to the intersectionality of struggles lay themselves open to charges of being appeals to a generic and superficial convergence of struggles. Where the explanatory task is undertaken, as in the *ante-litteram* intersectional theoretical field of ecofeminism, it identifies the common matrix of the various form of domination in the field of *episteme* and in cultural logic.

Therefore, what the intersectional paradigm *tout court* lacks is a consistent social and power theory, hence the charge of being merely cultural or, worst, of cultural reductionism. Cultural analysis, of course, is not a problem *per se*, it becomes so when it is the sole approach to social criticisms, because how the social is conceptualized is important if we wish to make effective political strategies and authentic alliances.

From here it is possible to untie the first of the three questions comprised in the initial one: a) how to give socio-material depth to the intersectional perspective?

On the other hand, the attention to the social dimension leads CAS to develop a critique of capitalism, as it is the context in which animal oppression massively occurs. Here David Nibert's formulation of speciesism as a legitimizing ideology of the exploitation of animals in the economical processes set a trend[4]. Such a blatant reductionism enters into conflict with

[4] David Nibert, *Animal Rights/Human Rights: Entanglements of Oppression and Liberation*, Rowman & Littlefield, Lanham 2002.

CAS' intersectional tenet. Thus, to avoid this impasse some authors resort to the notion of the existence of different systems or structures of power and domination intersecting (vaguely) with each other: speciesism, capitalism, patriarchy, racism. This kind of analysis, however, supports a preeminence of speciesism over the other systems and conceives the relation between speciesism and capitalism as simply quantitative. In this view, capitalism takes to its extreme consequences speciesism removing any limitation to the scale and intensity of animal exploitation. As the thesis will point out, this perspective lays itself open to charges of economic reductionism giving a flawed account of the social and not grasping the salient features that make a society capitalist or not.

From here it is possible to untie the second and the third of the tripartite initial question: b) how to frame capitalism in non-reductionist ways? And: c) in what form is given the necessary link between capitalism and animal oppression?

Going back to our social network jargon: the task is to explain why and how you cannot call yourself antispeciesist if you are not at the same time anti-capitalist (and anti-heterosexist and anti-racist).

Therefore, the desideratum, which constitutes an equal lacuna in the field of CAS is a logic for the socio-political analysis of animal oppression in capitalist societies which is not taken in the dichotomy between cultural and economical and which satisfy the double bind of both material and intersectional analysis.

The historico-conceptual formation of CAS, the issue of intersectionality, the current of ecofeminism and the discussion of CAS' literature on links between speciesism and capitalism by means of the reference to various Marxist traditions (traditional Marxism, Western Marxism, Operaismo and Post-Operaismo) and its shortcomings are dealt with in the first chapter. Falls within the scope of this chapter also the analysis of the attempts from inside the sphere of animal rights to engage with Marx and the left. It will be shown how the theoretical premises of animal rights theory – which are deeply rooted in a liberal, moralistic and analytic philosophical tradition – make such attempts superficial, simplistic and basically mistaken.

The second chapter is devoted to the elaboration of the macro-logic for socio-political analysis of capitalist societies. The starting point of this

elaboration is the conception of what Marx's critique of political economy is, drawing on the so-called *"Neue Marx-Lektüre"* (New Marx Reading). According to the New Max Reading, of which a historical and conceptual overview will be provided, Marx's critique of capitalism does not aim to foster an "alternative" economic doctrine to redistribute the social wealth in a fairer and more egalitarian way based on existing unjust relations; rather, it is an attempt to conceptually reconstruct the historico-structural conditions of possibility of these social relations themselves.

Thus, the new reading of Marx convincingly rereads Marx's critique of political economy in terms of critical analysis of the constitution of social complexity in the *specific* conditions of capitalist production. This is the level of the social forms: economic forms (value, money, capital) but also legal-political forms (law and state). This abstract-conceptual level will be integrated with the dimension of *dispositifs* which accounts for the variable and contingent historico-empirical reality of the social: institutional configurations, fields of knowledge, forms of subjectivation. Finally, the Foucauldian notion of *dispositif* will be deepened through a – hybridizing – reference to Jacques Rancière's concept of politics and the framework of historical-materialist policy analysis (HMPA), in order to analyze empirical related trajectories of conflicts, relations of forces, actor and power constellations.

It will be shown that it is only in the specific connection between these two – analytically distinct – dimensions that they constitute historical social *complexes*, thus giving the possibility to speak not of capitalism as a mere economical system but of capitalist social complexes (CSC) which comprise other social forms besides the economic and political ones.

The third chapter develops precisely this aspect by showing the (necessary) emergence of a form of human-animal relation in connection with the specific structural constraints imposed by the conditions of the capitalist mode of production. To consistently undertake this extension, firstly it is outlined how Marx's concept of "trinity formula" summarizes that whole (abstract structural connection) which (economic) social forms constitute. Then, it will be contended that the enchanted world of the trinity formula gives rise to a conceptualization of an imaginary community "nation" and correspondent population which is based on the structural characteristics

of CSC. Starting from the joint analysis of a lacuna and a limit of Marx's theory, it will be possible to identify, within the regulatory framework of the whole/nation the forms of the production of population of CSC. Certainly, the dominion over animals is much more long-standing than capitalist societies themselves and it is one of their pre-constitutive elements. Nonetheless, the chapter argues that with the transition to CSC and in connection to their specific separation between politics and economy, such domination undergoes a qualitative change and the human-animal relation becomes structurally organized by what we can be labeled the "anthropological form" of the production of population. It will be contended that this form is the reified-naturalized, thus invisibilized, matrix of the process of *producing human*.

The analysis of the anthropological form – pursued in the last section of chapter third – constitutes the first step in the *operationalization* of the macro-logic to the field of animal oppression and human-animal relation in CSC. The level of the *dispositifs* is, then, addressed in the fourth chapter.

Among the three different and overlapping dispositifs in which the anthropological form is concretized in capitalist social formations – dietary *dispositif*, pharmaceutical-experimentation *dispositif*, entertaining-pet *dispositif* – the thesis exemplarily explores the birth of the dietary *dispositif* in the nineteenth century because historically the hugest change in purpose and function has been recorded with respect to meat production and consumption which underwent a process that can be understood with the expression "*hygienizing meat*".

First, the institution of the modern slaughterhouse will be presented descriptively, highlighting its peculiarities (from the architecture to the different professionals who work in there) thanks to the reference to historical case studies on both European cities and American (North and South) ones. After having sketched the changes experienced by the zootechnical sector with the transition to CSC which have led to the development of industrial farming in its being fundamentally correlated to the modern abattoir, it will be pointed out the essential feature of the latter, i.e. centralization, by means of a comparison with the system of private slaughterhouses of pre-capitalist social complexes. Then the dynamics of formation of the *dietary dispositif* are taken into account:

addressing both the dimension of knowledge and politics and claiming the crucial role played by the concept of hygiene (in its moral and physical double meaning) and by the hygienist movement in the establishing of the meat-slaughterhouse-animals complex reforms.

1. SITUATING CRITICAL ANIMAL STUDIES

1.1 HISTORY OF THE FORMATION OF CAS

If every historical account begins by identifying in the timeline a date which conventionally distinguishes between a before and an after, the history of "the animal question" traditionally starts in 1975 with the publication of *Animal Liberation*[1] by the philosopher Peter Singer. This tradition coincides with «a master-narrative in the field of animal studies, a narrative that traces significant philosophical concern with the moral status of nonhuman animals back only to the 1970s and to "Oxbridge-style" analytic moral philosophy»[2]. The case for the publication of *Animal Liberation* was offered to Singer, at the time a postgraduate philosophy students at Oxford University, after he sent an unsolicited review of a book entitled *Animals, Men and Morals*[3] written in 1971 by Roslind and Stanley Godlovitch and John Harris, three other young Oxford philosophers members of the so-called Oxford Group or Oxford Vegetarians, an intellectual circle interested in the idea of developing a moral philosophy that included non-humans.[4].

In adopting this convention we can safely say that in the last 45 years the reflection and research on the topic of human-animal relations and animality, broadly intended, have developed exponentially. A growing

[1] Singer, *Animal Liberation* cit.
[2] Dawne McCance, *Critical Animal Studies: An Introduction*, SUNY Press, Albany 2012, pp. 7-8.
[3] Stanley Godlovitch *et al.*, *Animals, Men and Morals*, Victor Gollancz, London 1971.
[4] See Peter Singer, "The Oxford Vegetarians - A Personal Account", in *International Journal for the Study of Animal Problems*, vol. 1, no. 3 (1982), pp. 6-9. This is the mainstream genealogy of the animal question. As we shall see below fundamental contributions came, in the same 1980s, from feminism, especially ecofeminism, and often in direct opposition to Singer and Regan's approach.

number of disciplines, such as philosophy, anthropology, ethology, psychology, sociology, history, geography, biology, literary studies, film studies, etc., has turned its interest to these topics giving rise to the vast interdisciplinary field of animal studies (AS), or human-animal studies (HAS). We have witnessed an actual "animal turn" which has oriented scholarship in the humanities and social sciences through a new paradigm of research. A change in the number of publications, conferences, books, academic programs, societies, etc., has come with a qualitative change: «As it has expanded the range of possible research topics in a number of disciplines, the animal turn has also suggested new relationships between scholars and their subjects, and new understandings of the role of the animal in the past and at present»[5]. Even if in that same article of 2007 that made the expression "animal turn" famous, the author underlines that «the study of animals [...] remains marginal in most disciplines»[6], since the early 2000s, the field of AS has been strongly challenged. In particular, criticisms have been directed against the process of academization accused of neutralizing and co-opting the political and social changing potential intrinsic to the question of the animal, that was, instead, already so explicit in its "inaugural" book, right from the title which pointed to a normative commitment to the *liberation* of animals from exploitation.

Thus in 2001 a «theory-to-action activist led based scholarly think-tank»[7] founded the "Centre for Animal Liberation Affairs", then in 2007 renamed "Institute for Critical Animal Studies", formalizing a new field of study labeled Critical Animal Studies (CAS). It has to be highlighted here that CAS has little, if anything, to do with the "Oxbridge-style" analytical Singerian framework and its legacy. CAS vigorously refuse and criticize the liberal position on animal rights endorsed by these perspectives which aim at extending the legal discourse on fundamental human rights to non-human animals – or, at least, to some of them – on the basis of the most suitable and well-reasoned moral theory (e.g. giusnaturalism[8], contractualism[9]).

[5] Harriet Ritvo, "On the Animal Turn", in *Daedalus*, vol. 136, no. 4 (2007), pp. 118-122, p. 119.
[6] *ibid.*, p. 122.
[7] From ICAS site: `http://www.criticalanimalstudies.org/`
[8] Tom Regan, *The Case for Animal Rights*, University of California Press, Berkeley 1983.
[9] Robert Garner, *A Theory of Justice for Animals: Animal Rights in a Nonideal World*, Oxford University Press, Oxford 2013.

The "founding act" of CAS, the manifesto written on the occasion of the establishment of the ICAS, affirms the rejection of «apolitical, conservative, and liberal positions [. . .] reformist, single-issue, nation-based, legislative, strictly animal interest politics»[10]. In light of this, it could seem odd to read the emergence of the field of critical animal studies – in spite of its self-perception and self-definition – as a specialization in analytic philosophy born within the Oxford Group as someone does[11].

Now, what the adjective "critical" stand for[12]? First of all, of course, it means the critique of AS, relabeled in this view "mainstream animal studies" (MAS). CAS' "founding act" is harshly explicit on this opposition:

> Animal studies has already entrenched itself as an abstract, esoteric, jargon-laden, insular, non-normative, and apolitical discipline, one where scholars can achieve recognition while nevertheless remaining wedded to speciesist

[10] Steve Best *et al.*, "Introducing Critical Animal Studies", in *Journal for Critical Animal Studies*, vol. 5, no. 1 (2007), pp. 4-5.
[11] McCance, *Critical Animal Studies* cit., pp. 4-8.
[12] Here again the reference point is to how CAS has been defined by its proponents firstly and in later publications situating themselves in CAS tradition such as Nik Taylor and Richard Twine (eds.), *The Rise of Critical Animal Studies. From the Margin to the Centre*, Routledge, London 2014. Given that, McCance's original interpretation of the word "critical" is rejected for it seems to add confusion to an already porous definition. She reads it in three senses: «First (as derived from the Greek *krisis*, a sifting, *krinein*, to sift, and the adjective *kritikos*, able to discern), the word suggests concerned questioning of inherited conceptual frameworks and modes of action they inform, the kind of judgment or discernment that belongs to interpretation of the history of human. Second, the word critical goes back to the Latin*criticus*, in grave condition, and *criticare*, to be extremely ill: given the side effects of today's mass mistreatment of animals – loss of biodiversity; extinction of species; pollution of water, air, and soil; antibiotic resistant diseases; global warming, and so on – this sense of critical as crisis cannot be lost on "critical animal studies"[. . .] [The] third meaning of critical that relates to the crisis or turning point of a disease, a hinge, a pivot point where things might just turn around and go another, and better, way» (McCance, *Critical Animal Studies* cit., pp. 4-5). Admittedly, McCance's second meaning of crisis can be found in the more traditional formulations of CAS. The 2007 manifesto, indeed, states: «The aim of the Institute for Critical Animal Studies (ICAS) is to provide a space for the development of a critical approach to animal studies, one which perceives that relations between human and nonhuman animals are now at a point of *crisis* which implicates the planet as a whole. This dire situation is evident most dramatically in the intensified slaughter and exploitation of animals [. . .]; the unfolding of the sixth great extinction crisis in the history of the planet [. . .]; and the monumental environmental ecological threats of global warming, rainforest destruction, desertification, air and water pollution, and resource scarcity, to which animal agriculture is a prime contributor» (Best *et al.*, "Introducing Critical Animal Studies" cit., and also: «In this sense 'critical' expresses the urgency of our times in the context of ecological crisis» (Nik Taylor and Richard Twine, "Locating the 'Critical' in Critical Animal Studies", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 1-15, p. 2).

> values, carnivorist lifestyles, and at least tacit – sometime overt – support of numerous forms of animal exploitation such as vivisection. In recent years Critical Animal Studies has emerged as a necessary and vital alternative to the insularity, detachment, hypocrisy, and profound limitations of mainstream animal studies that vaporizes their flesh and blood realities to reduce them to reified signs, symbols, images, words on a page, or protagonists in a historical drama, and thereby utterly fail to confront them not as text but rather as sentient beings who live and die in the most sadistic, barbaric, and wretched cages of technohell that humanity has been able to devise, the better to exploit them for all they are worth[13].

What is lamented here is the detachment of theory from activist practice, the «pursuit of theory-for-theory's sake»[14] without any connection to the objective of social change regarding the condition of the animals. On the contrary, CAS scholars are committed to «engaged theory»[15] which directly or indirectly works in support of a social change, more or less radical. They are committed to *praxis*, in the sense of interconnection between theory and practice. This concept of praxis is rooted in Western Marxist tradition[16]. In particular, the relevant reference for CAS – since its first formulations to more contemporary ones, though less explicitly and pervasively – is Frankfurt School's elaboration of praxis in the context of its "critical theory of society". Best refers widely to the Frankfurt School devoting an entire section of his 2009 essay to highlight the affinities between "CAS and the Frankfurt School", as the section itself is entitled. He states:

> There are interesting historical and theoretical parallels between the emergence of the Frankfurt School and their "critical theory" approach against positivist academia and conformist cultures in Europe and the US, and the CAS polemic directed against MAS and the positivism and apolitical culture that continues to dominate academia in the present day[17].

This leads to the second, substantive, meaning of the adjective "critical" in the expression "critical animal studies". The reference is to the two 1937 programmatic essays on the difference between traditional and critical

[13] Best *et al.*, "Introducing Critical Animal Studies" cit., p. 4.
[14] Best, "The Rise (and Fall) of Critical Animal Studies" cit.
[15] Taylor and Twine, "Locating the 'Critical' in Critical Animal Studies" cit., p. 6.
[16] On Western Marxism see below, section 1.3.1.
[17] Best, "The Rise (and Fall) of Critical Animal Studies" cit.

theory: Max Horkheimer's *Traditional and Critical Theory*[18] and Herbert Marcuse's *Philosophy and Critical Theory*[19] where the difference between the two is traced in the explicit political commitments and normative, value-laden perspective of critical theory which aims at the radical transformation of the existing social order in an emancipatory sense. As Marcuse spells out:

> In its concept of an ultimate goal, critical theory did not intend to replace the theological hereafter with a social one [. . .] It only makes explicit what was always the foundation of its categories: the demand that through the abolition of previously existing material conditions of existence the totality of human relations be liberated [. . .] In the theoretical reconstruction of the social process, the critique of current conditions and the analysis of their tendencies necessarily include future-oriented components[20].

In more recent years, CAS anthologies, in the introductory task of delimiting their own field of study, make less direct reference to these authors, but nevertheless speak in terms of praxis[21] and critical theory, and eventually restore to explicit reference. In 2014 two prominent critical animal studies scholars in their conclusive essay for the important collection *The Rise of Critical Animal Studies: From the Margin to the Centre* asserts:

> CAS [is] a strand of critical theory (broadly defined) [. . .] By "critical", we mean the application of critical theory towards actual liberation. Max Horkheimer's famous definition of critical theory as that which tries "to liberate human beings from the circumstances that enslave them" is correct as far as it goes, but wrong in that it places the limits of liberation at only "the human". We would say that critical theory and, therefore, *critical* animal

[18] Max Horkheimer, "Traditional and Critical Theory", in *Critical Sociology. Selected Readings*, ed. by Paul Connerton, trans. by M. J. O'Connell, Penguin, London 1976, pp. 207-208.
[19] Herbert Marcuse, "Philosophy and Critical Theory", in *Negations: Essays in Critical Theory*, trans. by Jeremy J. Shapiro, Beacon Press, Boston 1969, pp. 147-154.
[20] *ibid.*, p. 145.
[21] For example, «a core difference between the animal studies scholar and the critical animal studies scholar is an intended commitment to praxis. Praxis is the application of theory to action and vice versa» (Carol Glasser, "The Radical Debate: A Straw Man in the Movement", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 241-261, p. 242). Or again in the introduction of a 2018 anthology entitled *Critical Animal Studies. Toward Trans-Species Social Justice* the editors declare: «Praxis means to bring theory into action» (Atsuko Matsuoka and John Sorenson (eds.), *Critical Animal Studies: Towards Trans-species Social Justice*, Rowman & Littlefield, Lanham 2018, p. 18).

> studies, is that which seeks to liberate the animal from the circumstances that seek to enslave her[22].

1.1.1 Before CAS: animal rights and the left

CAS is, then, overtly committed to politics. Which politics? Naturally, Leftist-Marxish-anticapitalist one. Before CAS, in its opposition to the liberal, moralistic and abstract discourse of animal rights, gave birth to this hybrid marriage, the mutual distrust between the animal question and the "left" was proverbial.

The juridical framework of animal rights (let alone the animal welfare discourse) as an extension to animals of the discourse of human rights, which is the only political outcome provided for the animal question from Oxbridge-style discussions, seems to have, at least, a controversial appeal for a Marxist, broadly intended[23].

Besides, although there was not yet an animal question in a proper and complete sense, the debate over vivisection and animal treatment was vivid in the mid-nineteenth century, especially in England and Marx and Engels themselves did not spare derisive words when referring to pro-animals advocates. And, of course, in Marxist tradition what Marx and Engels said has a considerable weight. It is well-known the passage from the *Communist Manifesto* in which they, in the course of delineating "Conservative, or Bourgeois, Socialism" state:

> A part of the bourgeoisie is desirous of redressing social grievances in order to secure the continued existence of bourgeois society. To this section belong economists, philanthropists, humanitarians, improvers of the condition of the working class, organisers of charity, members of societies for the prevention of cruelty to animals, temperance fanatics, hole-and-corner

[22] Helena Pedersen and Vasile Stanescu, "Future Directions of Critical Animal Studies", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 262-275, p. 262.

[23] This is a debated question, see, for example, Steven Lukes, "Can a Marxist Believe in Human Rights?", in *Praxis International*, vol. 1, no. 4 (1981), pp. 334-345. More in general, the discourse of human rights and its illuminist-(male)subjectivity-centered humanism have received fundamental criticisms from authors in Marxian tradition, such as Giorgio Agamben, Costas Douzinas, Jean-Luc Nancy, Slavoj Žižek. On the other side, these criticisms have also meant a rethinking: according to Claude Lefort, Étienne Balibar, Jacques Rancière, Marx failed to see the true political dimension of human rights (e.g. the right to resist oppression, the right of association, the right to have rights).

reformers of every imaginable kind[24].

Engels alone is no less sardonic in listing the sects of "weirdos" that could have been attracted from the workers' revolution:

> And just as all those who can expect no favours from the official world or are finished with it – opponents of inoculation, supporters of abstemiousness, vegetarians, anti-vivisectionists, nature-healers, free-community preachers whose communities have fallen to pieces, authors of new theories on the origin of the universe, unsuccessful or unfortunate inventors, [. . .] honest fools and dishonest swindlers[25].

Although such judgments may appear to us today of a pitiless irony, they capture what was, in fact, the variegated composition and affiliation of animal welfare and animal right advocates at the time, as we shall see in the fourth chapter, where we will analyze the positioning of this group regarding the question of slaughterhouse reforms, the social composition of its actor and strategies. We will see that the charge of being a white, middle-class, moralistic, classist, patronizing positioning relied on solid bases. We can anticipate here two examples to show how Marx and Engels depict in proper tones this reality. First, Engels' list, by putting together vegetarians and antivivisectionists with nature-healers, preachers, opponents of inoculation, captures the strong spiritual/religious element against the fear of scientific materialism that characterized anti-vivisectionist/vegetarian groups. Second, the socialist reformer Henry Salt, creator of the *Humanitarian League* and author of *Animals' Rights: Considered in Relation to Social Progress* which is considered the most radical text within nineteenth-century pro-animals campaigning, writes that the butchery process was so repugnant that it could be only delegated to a «pariah class»[26]. With this in mind, the references to Salt and other socialists of the time, such as George Bernard Shaw and Edward Carpenter, that various

[24] Karl Marx and Frederick Engels, *Manifesto of the Communist Party*, in Karl Marx and Frederick Engels, *Marx & Engels Collected Works*, 50 vols., Lawrence & Wishart ebook, London 2010, pp. 477-519, p. 513.
[25] Frederick Engels, *On The History of Early Christianity*, in Marx *et al.*, *MECW* cit., pp. 445-469, p. 451.
[26] Henry Salt, *Animal Rights: Considered in Relation to Social Progress*, Society for Animal Rights, Clarcks Summit 1980, p. 61.

contemporary animal rights theorists[27] make in order to refute what they consider a prejudicial commonplace on the distance between the left and the animal rights movement – i.e. that the discourse of animal rights is part of bourgeois morality – start to lose their meaning.

On the other side, the animal rights tradition has devoted little interest to Marx. This comes with no surprise given its rootedness in moral discourse and liberalism. Therefore, those (few) who have worked in the direction of explicitly connecting animal rights and Marxism constitute a sort of contradiction in terms which makes itself visible in the oddity of approaching Marx's *œuvre* with the classical method of the "Oxbridge-style" analytic moral philosophy, as we shall see. The first essay in this direction, published in 1988, was written by British professor emeritus of sociology Ted Benton, defined as «pioneering ecosocialist»[28] under the title *Humanism = Speciesism: Marx on Humans and Animals*[29]. Despite the fact that no specific tradition of studies on the subject has emerged from this publication, it can be said that it set a trend. Indeed all the other essays devoted to the topic which have appeared in a scattered way along the course of the decades keep its blueprint starting from accusing Marx of being speciesist and anthropocentric on the basis of his ontological humanism and often proposing and re-proposing similar perspectives and arguments. In "Benton's path" we can locate, obviously, his 1993 book *Natural Relations: Ecology, Animal Rights and Social Justice*[30], some circumstantial and critical observation in Barbara Noske[31] and essays by

[27] See Alasdair Cochrane, *An Introduction to Animals and Political Theory*, Palgrave Macmillan, London 2010, p. 102; John Sorenson, "Constructing Extremists, Rejecting Compassion: Ideological Attacks on Animal Advocacy from Right and Left", in John Sanbonmatsu (ed.), *Critical theory and Animal Liberation*, Rowman & Littlefield, Lanham 2011, pp. 219-237, p. 234; Gary Francione *et al.*, "The American Left Should Support Animal Rights: a Manifesto", in *The Animals Agenda* (1993), pp. 28-34; John Sanbonmatsu, "Introduction", in Sanbonmatsu (ed.), *Critical theory and Animal Liberation* cit., pp. 1-32, p. 15; Renzo Llorente, "Reflections on the Prospects for a Non-Speciesist Marxism", in Sanbonmatsu (ed.), *Critical theory and Animal Liberation* cit., pp. 121-135, p. 129.

[28] John Bellamy Foster and Brett Clark, "Marx and Alienated Speciesism", in *Monthly Review*, vol. 70, no. 7 (2018), pp. 1-20, p. 1.

[29] Ted Benton, "Humanism=Speciesism: Marx on Humans and Animals", in *Radical Philosophy*, vol. 50 (1988), pp. 4-18.

[30] Ted Benton, *Natural Relations: Ecology, Animal Rights, and Social Justice*, Verso Books, London-New York 1993.

[31] Barbara Noske, *Beyond Boundaries: Humans and Animals*, Black Rose Books, Montreal 1997.

David Sztybel[32], Katherine Perlo[33], Lawrence Wilde[34], the manifesto for an animal rightist left by Charlton, Coe and Francione[35], more recently articles by Ryan Gunderson[36], Corinne Painter[37] and others[38]. What, in the first instance, all these texts have in common, regardless of the individual positions presented and the Marxian passages actually commented, is their "Oxbridge-style" animal rightist approach, both in argumentative form and in content. Following in the wake of Singer and Regan, these works assume, first of all – explicitly some, implicitly others – the very definition of speciesism, that is: a *prejudice* according to which the species of an individual is relevant in establishing who is part of a given moral community and who is not. From this definition come two features that also characterize these papers. On the one hand, from placing speciesism at a cognitive level as prejudice descend the analytic style of argument: logical refutation of prejudice, rationalistic analysis of the premises and counter-examples, formalistic rigidity and closure. On the other hand, anchoring speciesism to the concept of moral community, this definition structures the entire discourse within the boundaries of current normative ethics. According to its most common definition, «*Normative ethics* is the attempt to formulate a *morally* useful principle about the normative status of action»[39]. The fundamental principle, adopted as much in Singer's utilitarianism as in Regan, Garner and Francione's animal rights theory – which the authors we are examining embrace – is the principle of equal moral consideration on the basis of certain qualities possessed by individuals. The strategy is, therefore, to demonstrate with scientific evidence, coming from biology, ethology, zooanthropology and other disciplines, that animals also

[32] David Sztybel, "Marxism and Animal Rights", in *Ethics and the Environment*, vol. 2, no. 2 (1997), pp. 169-185.
[33] Katherine Perlo, "Marxism and the Underdog", in *Society & Animals*, vol. 10, no. 3 (2002), pp. 303-318.
[34] Lawrence Wilde, "'The creatures, too, must become free': Marx and the Animal/Human Distinction", in *Capital & Class*, vol. 24, no. 3 (2000), pp. 37-53.
[35] Francione *et al.*, "The American Left Should Support Animal Rights: a Manifesto" cit.
[36] Ryan Gunderson, "Marx's Comments on Animal Welfare", in *Rethinking Marxism*, vol. 23, no. 4 (2011), pp. 543-548.
[37] Corinne Painter, "Non-human Animals within Contemporary Capitalism: A Marxist Account of Non-Human Animal Liberation", in *Capital & Class*, vol. 40, no. 2 (2016), pp. 327-345.
[38] Diana Stuart *et al.*, "Extending Social Theory to Farm Animals: Addressing Alienation in the Dairy Sector", in *Sociologia Ruralis*, vol. 53, no. 2 (2013), pp. 201-222.
[39] Fred Feldman, *Introductory Ethics*, Prentice-Hall, Upper Saddle River 1978, p. 40.

possess the characteristics considered indispensable to have interests and, thus, to obtain equal moral consideration and, therefore, to become part of the moral community; at least as moral patients. A moral patient is an individual who is unable to perform moral actions but evidently can suffer the consequences of actions, thus he/she has to be recognized as a bearer of interests that must be protected by guaranteeing the fundamental rights to life, physical integrity and freedom, just as is the case with so-called marginal human beings (e.g. children, people with mental or physical disabilities). From what has been said, it is now possible to identify the basic structure of the normative ethical theories. They anchor seamlessly ethics to ontology. In fact, if to be part of a moral community, both in the position of agents and in that of patients, it is necessary to be endowed with certain characteristics considered essential for the satisfaction of the principle of equal consideration, then, conversely, any ontological investigation is seen as functional to share rights and moral obligations, as a basis of support for ethical discourse. In the field of normative ethics, in fact, to support an essential difference is, *ipso facto*, to support a difference in the possibility of access to the circle of moral consideration that includes the one (humans) and excludes the other (animals).

Such a perspective is what the essays mentioned above have in common and their starting point, the theoretical glasses, so to speak, through which these authors look at Marx's thought. This explains why they focus almost exclusively on young Marx's *Economic and Philosophical Manuscripts of 1844*[40] (or *Paris Manuscripts*) – the most Feuerbachian and thus ontological Marxian text – and on other rare explicitly ontological moments of his reflection. Therefore, these essays amass "stack" of Marxian, and sometimes Engelsian, quotations on human-animal dualism extrapolated from the context, while ignoring not only the wider picture of Marxian *opus* but also intellectual influences, historical conditions and debates that constitute the background of those specific sentences[41]. In what thoroughly seems a non-substantial juxtaposition of very distant theories (animal rights and Marxism), these

[40] Karl Marx, *Economic and Philosophic Manuscripts of 1844*, in Marx *et al.*, *MECW* cit., pp. 229-346.
[41] This criticism has been raised also by Marco Maurizi, *Al di là della natura: gli animali, il capitale e la libertà*, Novalogos, Roma 2011, pp. 72-85 and Foster and Clark, "Marx and Alienated Speciesism" cit., p. 2.

authors (mis-)read Marx as an exponent of a typical normative ethical theory who must, consequently, be approached with the formal and content tools of this framework. In this vein, the shared accusations (or defense from these accusations[42]) of Marx's lack of theoretical consistency because of his non-adherence to the perspective of animal rights, or more generally for his anthropocentrism, catch the eye. The main self-contradiction is seen in what this literature claims to be an adoption, on the one hand, of a continuist perspective of the human-animal relation, guaranteed by Marxian naturalism for which the human is a natural being, and, at the same time, on the other hand, of a humanist vision of the human as a privileged entity, essentially and qualitatively different from other animals (human exceptionalism). As Benton claims:

> The ontological basis of the ethical critique of capitalism (embedded in the notion of estrangement) appears to be inconsistent with the coherent formulation of its transcendence (in particular, the notion of 'humanisation' in relation to animals as part of nature). As I shall suggest later, this dilemma can be resolved by a revision of the ontology of the *Manuscripts* which nevertheless leaves intact a good deal of the ethical critique of capitalist society[43].

Letting aside the mistaken idea that Marx analysis of capitalism is conducted a) from an ethical standpoint and b) from an estrangement/alienation[44] standpoint, the pretentious aim of all these brief (!) papers is a revision, extension and integration of Marxism with the theory of animal rights, in the belief that only in this way Marxism's inconsistencies can be resolved

[42] See Wilde, "'The creatures, too, must become free'" cit.
[43] Benton, "Humanism=Speciesism" cit., p. 5.
[44] The terms "*Entfremdung*" (estrangement) and "*Entäußerung*" (alienation) have been firstly used in a systematic way by Hegel beginning with *The Phenomenology of Spirit*. In Hegel lexicon the two terms are not equivalent: *Entfremdung* and *sich entfremden* always have the negative meaning of "splitting", "extraneousness"; *Entäußerung*, *sich entäußern* and *Veräußerung*, have instead the meaning of "renunciation", which can make positive or negative sense. In *1844 Manuscripts*, however, the two terms "*Entfremdung*" (estrangement) and "*Entäußerung*" (alienation) are indistinct and indistinguishable. Rarely the distinction of the two terms has a specified sense. Moreover, in this text there is a clear prevalence of *Entfremdung*, which appears 83 times (29 times in the *Die entfremdete Arbeit* (*Estranged labour*) chapter, while *Entäußerung* appears 55 times (13 times in that chapter). Also looking at the use of adjectives and the prefix *ent-*, *entfremd-* e *entäußer-* (i.e. of verb forms) there is a strong prevalence of the former (152 times throughout the text and 62 in the chapter *Estranged labour*) over the latter (99 times throughout the text and 34 in the chapter *Estranged labour*).

and then in order to consequently use its conceptual resources to address the problem of the animal condition in capitalism. A quote from Sztybel gives a good insight into this attitude:

> It may be argued that there are contradictory tensions in Marxism, which can only be resolved by changing the received view of Marxism into a vision that admits of animal rights, or else a suitable equivalent [. . .] As I will argue, revision of Marxism in the direction of animal rightism is both necessary and desirable[45].

Now, the core point of this revision is, as established by Benton, the extension of the concept of alienation and exploitation to animals (to which logically follows the extension of the concept of class). In other words, in order to use the concept of alienation in the animal rights perspective what has to be done is to show that animals too are alienated in the conditions of capitalist production, which goes hand in hand with the questioning of human exceptionalism inherent in Marxian ontology and the affirmation of parallelism between the working class and "working animals".

Thus, before examining these arguments in detail, it is necessary to dwell on Marxian anthropology-ontology the way it is understood by this literature as it emerges right in the scope of the analysis of alienated labor undertaken at the end of the first manuscript[46]. One of the aspects of alienation is human alienation from his/her *Gattungwesen*, an expression derived by Feuerbach, which is variably translated as "species-being", "generic essence" or "generic being" which means "human essence". Marx in his argumentation on the essence of human being follows, on a formal level, the traditional model of Western philosophy: after sanctioning the belonging of human and animal to the same *genus* (to use the language of Aristotle that echoes in Marx, via Feuerbach[47]), he proceeds to identify the specific difference (*differentia specifica*) that distinguishes them qualitatively and constitutes the human essence of real humans. The indicted passage is the following:

[45] Sztybel, "Marxism and Animal Rights" cit., p. 170.
[46] Marx, *Economic and Philosophic Manuscripts of 1844* cit., pp. 270-283.
[47] See Marx W. Wartofsky, *Feuerbach*, Cambridge University Press, Cambridge 1977, pp. 224, 374, 423; Jonathan E. Pike, *From Aristotle to Marx: Aristotelianism in Marxist Social Ontology*, Routledge, London 2019.

> For labour, life activity, productive life itself, appears to man in the first place merely as a means of satisfying a need—the need to maintain physical existence. Yet the productive life is the life of the species. It is life-engendering life. The whole character of a species — its species-character—is contained in the character of its life activity; and free, conscious activity is man's species-character. Life itself appears only as a means to life. The animal is immediately one with its life activity. It does not distinguish itself from it. It is its life activity. Man makes his life activity itself the object of his will and of his consciousness. He has conscious life activity. It is not a determination with which he directly merges. Conscious life activity distinguishes man immediately from animal life activity. It is just because of this that he is a species-being. Or it is only because he is a species-being that he is a conscious being, i.e., that his own life is an object for him. Only because of that is his activity free activity[48].

It is not surprising, therefore, that the critics we are considering find in these pages – whose adherence to anthropologism (i.e. an essentialist perspective of human essence) in the wake of Feuerbach and Bruno Bauer against Hegel, is made explicit by Marx himself and indisputably recognized[49] – the perfect foothold for their reading in terms of normative ethical theory. All in all, according to their point of view the conceptual work to do is: isolate the essential characteristics that Marx attributes exclusively to the human; given the one to one relationship between ontology and ethics, impute to Marx a speciesist ethical theory and then, by (anachronistically) drawing on the most recent achievements in ethology and biology, show that these characteristics are possessed also by animals and, finally, on the basis of this revised ontology include them in the circle of moral consideration. We owe the most paradigmatic example of this approach to Sztybel who, accumulating quotations from various Marxian and Engelsian texts (not only from the *Paris Manuscripts*), proposes a list of nine traits on the basis of which Marxism would support human exceptionalism – without

[48] Marx, *Economic and Philosophic Manuscripts of 1844* cit., p. 276.
[49] See Louis Althusser, *For Marx*, trans. by Ben Brewster, Verso Books, London-New York 2005; Jacques Rancière, "The Concept of Critique and the Critique of Political Economy. From the *1844 Manuscripts* to *Capital*", in *Reading Capital: The Complete Edition*, trans. by Ben Brewster and David Fernbach, Verso Books, London-New York 2016, pp. 62-134; Michael Heinrich, *An Introduction to the Three Volumes of Karl Marx's Capital*, trans. by Alexander Locascio, Monthly Review Press, New York 2012 and Roberto Fineschi, *Marx e Hegel. Contributi a una rilettura*, Carocci, Roma 2006, especially pp. 28-30, p. 47.

explicitly identifying that the pivotal role is played by the concept of labor, understood in an anthropological sense as abstract life activity:

> "man" alone is (1) a being for himself, (2) individuated only in the midst of society, (3) defined by labor and productivity, (4) productive of "his" own subsistence, (5) productive beyond immediate physical needs and for others beyond self and kin, (6) a tool-making animal, (7) a transformer of nature, (8) possessed of consciousness and knowledge of nature, and (9) capable of consciously making "his" own history[50].

Now, once erased human exceptionalism in Marx's ontological stance, according to this literature, it is possible to extend the notion of alienation to animals. The first and most influential attempt in this direction has been developed by Dutch anthropologist Barbara Noske back in 1989. She applies each form of human alienation proposed by Marx in the *Paris Manuscripts* to farm and laboratory animals. Noske's analysis identifies four forms, plus an overall one, of alienation: 1) from the product of labor: «animals are alienated from what they produce which consists of either their own offspring or (parts of) their body»[51]; 2) from the productive activity: animals are forced to perform a single productive activity (such as fattening) at the expense of all other natural activities that are their own; 3) from their fellow animals: the animals are estranged from their fellow animals because they are removed from their natural social configurations and forced in such conditions as to prevent the emergence of any normal social bond; 4) from the environment (the fourth form introduced *ex novo* by Noske): the animals being removed from their ecosystems are alienated from their natural stimuli and their natural behavioral patterns. 5) Finally, alienation from nature: the union of these four forms of alienation results in the alienation of animals from their species life. Thus, concludes Noske, animals are "deanimalized" in the functioning of capitalism[52].

To sustain that working animals constitute an alienated and exploited group foreshadows parallelism with the working class and its being a revolutionary agent, according to traditional Marxism which claims that the working class, perceiving its own alienation, recognizes that its plight stems

[50] Sztybel, "Marxism and Animal Rights" cit., p. 178.
[51] Noske, *Beyond Boundaries: Humans and Animals* cit., p. 18.
[52] *ibid.*, p. 12.

from capitalism and that capitalism must be overthrown. This parallelism, foreshadowed in Noske and Benton[53], is explicitly made by Perlo, Hribal and, drawing on them, more recently by Painter. In these perspectives animals have agency defined as «ability to intentionally engage in an activity, such as caring for one's young»[54] and «as the capacity and intention to satisfy interests that are intimately connected to their flourishing – recall that they cry, they mourn, they flee and they bite back when they are mistreated»[55]. Animals are «part of the working class»[56] and their labor produce surplus value[57]. To the objection that animals would not experience themselves as alienated because they are unable to conceptualize their nature and, consequently, unable to conceive themselves in terms of a class conflict, Painter recalls the words of Catharine MacKinnon:

> Who asked the animals? [. . .] Do animals dissent from human hegemony [and dominance]? I think they often do. They vote with their feet by running away. They bite back, scream in pain, withhold affection, approach warily, fly and swim away[58].

Animals, therefore, in this perspective are able to perceive their own alienation (in the form of severe suffering, frustration caused by the exploitation to which they are subject) and, hence, in accordance with Marxism, are a revolutionary class, at least potentially: if they had the ability, they would «unite and break the chains that compel them to labour»[59].

Letting aside the intrinsic problems in these attempts to juxtapose animal rights theory and Marx, letting aside the reductionist wrongness of the thesis that Marx's whole criticism of capitalism would rest on condemning the reduction of humans to the condition of animals[60], letting

[53] See Benton, *Natural Relations* cit., p. 59.
[54] Painter, "Non-human Animals within Contemporary Capitalism: A Marxist Account of Non-Human Animal Liberation" cit., p. 334.
[55] *ibid.*, p. 336.
[56] Jason Hribal, "Animals Are Part of the Working Class: a Challenge to Labor History", in *Labor History*, vol. 44, no. 4 (2003), pp. 435-453.
[57] Jason Hribal, "Animals Are Part of the Working Class Reviewed", in *Borderlands*, vol. 11, no. 2 (2012), pp. 1-37, p. 12 and Perlo, "Marxism and the Underdog" cit., p. 307.
[58] Quoted in Painter, "Non-human Animals within Contemporary Capitalism: A Marxist Account of Non-Human Animal Liberation" cit., p. 332.
[59] Bob Torres, *Making a Killing: The Political Economy of Animal Rights*, AK press, Oakland 2007, p. 39.
[60] As, for example, stated in Benton, *Natural Relations* cit., p. 23.

aside the charge of essentialism that can be made against both sides from a post-human perspective (what would be this "nature" from which animals would be alienated in Noske's fifth point?), there is a major problem to be addressed. Within the perspective of these leftist animal rightists, it is impossible to understand the intrinsic relations between animal oppression/exploitation and capitalism. Therefore Cochrane, after having considered the proposals of Benton, Noske, Perlo, is no wrong in questioning: «whether capitalism is a necessary impediment to achieving justice for [animals]» and in envisaging «a capitalist society which both raises animals for profit, and yet which does not cause them harm»[61]. In the literature we have reviewed, indeed, there is a complete absence of any conceptualization of what capitalism and capitalist society are. Benton and the others do not even refer to *Capital*, they reduce Marx to few citations from the *Economic and Philosophic Manuscripts of 1844* and to the concept of alienation which they maintain to be central to Marx's thought, ignoring (willingly or not)[62] the Althusserian-inspired debate around the two phases of Marx's thought and the role played in this conceptual break by *The German Ideology*[63] in which Marx and Engels criticize both the concept of *Gattungwesen* – in favor of the concept of *bestimmte Individuen* (real individuals) – and *Entfremdung/Entäusserung*, which after 1845 will surface Marx's writings only rarely and vaguely.

From this point of view, what Sztybel says about himself: «I am no Marxist»[64], can be extended to the other leftist animal rightists. Benton

[61] Cochrane, *An Introduction to Animals and Political Theory* cit., p. 108.
[62] Regarding Benton's position about the two phases of Marx, it has been observed that: «Benton's earlier interpretation of the *Paris Manuscripts* and their political-economic topics as Feuerbachian and Hegelian, his repeated hints to the contrast between the young and the old Marx, and Benton's adoption of Althusser's periodization of the theoretical development within Marx's works suggest that Benton shares Althusser's paradigm of Marx's epistemological break [. . .] Nevertheless, Benton's appreciative judgment of the *Paris Manuscripts* as the "deepest [. . .] of Marx's writings" seems to speak against the interpretation that Benton is a hardened Althusserian with respect to Marx's early writings» (Christian Stache, "On the Origins of Animalist Marxism: Rereading Ted Benton and the *Economic and Philosophic Manuscripts of 1844*", in *Monthly Review*, vol. 70, no. 7 (2018), pp. 22-41). As a matter of fact, Benton does not make any explicit comments on the issue in the article *Speciesism = Humanism*.
[63] Karl Marx and Frederick Engels, *The German Ideology*, in Marx *et al.*, *MECW* cit., pp. 19-539.
[64] `http://davidsztybel.info/99.html`

himself defines his framework as «loosely Marxian»[65]. Focusing on the *Paris Manuscripts*, a writing which is not part of the corpus on which traditional Marxism is based[66], and not referring to Western Marxism – which makes *1844 Manuscripts* the pivot of its view, as we shall see – they seem to be orphans of a coherent and comprehensive (however questionable) interpretation of Marx's theory from which to start their analyses on animals in capitalism. Nevertheless, the few authors who devote some explicit scattered sentences to categories such as surplus value and class – deriving the necessary consequences from Benton's premises – let us understand that the overall background is traditional Marxism: the «closed, coherent proletarian worldview and doctrine of the evolution of nature and history»[67] based on three pillars, i.e. ontological-determinist tendency, with the revolutionary metaphysics of a providential mission of the proletariat; the historicist interpretation of the form-genetic method, where the sequence of categories (commodity, value, money, capital) is the description in abstract terms of actual events occurred in the historical course; the critique of the content of the state, where the state is understood as a mere instrument of the ruling class[68]. It has been proven that traditional Marxism constitutes a deeply flawed and unsuitable account of the social dimension and mistaken account of capitalist social formation, thus any elaboration of "animals in capitalism" which somehow relies on it is bound

[65] Benton, *Natural Relations* cit., p. 5.

[66] For the definition of traditional Marxism the reference point is Ingo Elbe's overview: «The term "Marxism" was probably first used in the year 1879 by the German Social Democrat Franz Mehring to characterize Marx's theory, and established itself at the end of the 1880s as a discursive weapon used by both critics and defenders of "Marx's teachings". The birth of a "Marxist school", however, is unanimously dated back to the publication of *Anti-Dühring* by Friedrich Engels in the year 1878, and the subsequent reception of this work by Karl Kautsky, Eduard Berstein et al. [Thus] In many respects, Marxism is Engels' work and for that reason actually an Engelsism». The central reference texts of Marxism in addition to Frederick Engels, *Anti-Dühring*, in Marx *et al.*, *MECW* cit., pp. 5-309 are: Frederick Engels, *Ludwig Feuerbach and the End of Classical German Philosophy*, in Marx *et al.*, *MECW* cit., pp. 353-398 and Frederick Engels, *Karl Marx: Critique of Political Economy (Review)*, in Marx *et al.*, *MECW* cit., pp. 353-398; *Capital Vol. 1* – Chapter 32, "*Preface*" to *A Contribution to the Critique of Political Economy* (1859) (Karl Marx, *A Contribution to the Critique of Political Economy*, in Marx *et al.*, *MECW* cit., pp. 257-417, pp. 261-265) and Marx and Engels, *Manifesto of the Communist Party* cit. See Ingo Elbe, "Between Marx, Marxism, and Marxisms – Ways of Reading Marx's Theory", trans. by Alexander Locascio, in *Viewpoint Magazine*, vol. 21 (2013), `https://viewpointmag.com/2013/10/21/between-marx-marxism-and-marxisms-ways-of-reading-marxs-theory/`.

[67] *ibid.*

[68] See *ibid.*

to fail.

1.2 CAS AND INTERSECTIONALITY

Let's go back now to address CAS key concepts. Since its first explicit formulation, the field of CAS has been characterized not only as interdisciplinary but also as a distinctly intersectional approach[69], deeply concerned with understanding and framing species domination within the complex network of the various kinds of social domination, investigating their mutual intersections, overlaps and peculiarities. CAS has never understood animal domination as a single-issue, rather it brings the animal point of view – breaking the anthropocentric circle – within other critical perspectives. Arguably the juncture of intersection that has received the most attention in animal studies thus far is that between animals and gender underlining. This is due especially[70] to the ecofeminist roots of CAS and its debt to ecofeminist intersectional perspective[71]:

> A significant catalyst for debate on animal ethics came from ecofeminist writings during the 1970s, 1980s, and 1990s alongside, and often in tension with, the influential work of well-known animal philosophers such as Tom Regan and Peter Singer. Any contextualization of CAS must confront the fact that, in an intellectual sense, it existed before the term was coined, and

[69] As Richard Twine puts it: «the key concept of CAS: intersectionality» (Richard Twine, "Review: Defining Critical Animal Studies-An Intersectional Social Justice Approach for Liberation, Anthony J. Nocella, John Sorenson, Kim Socha and Atsuko Matsuoka (eds)", in *Animal Studies Journal*, vol. 3, no. 2 (2014), pp. 30-35, p. 32). See Taylor and Twine, *The Rise of Critical Animal Studies* cit.; Richard Twine, *Animals as Biotechnology: Ethics, Sustainability and Critical Animal Studies*, Earthscan, London 2010; Kim Socha, *Women, Destruction, and the Avant-Garde: A Paradigm for Animal Liberation*, Brill Rodopi, Amsterdam 2012; John Sorenson *et al.* (eds.), *Defining Critical Animal Studies: An Intersectional Social Justice Approach for Liberation*, Peter Lang, Bern 2014.

[70] One should not forget that there were close links between women's suffrage and anti-vivisection movements prior to ecofeminist debates. See Coral Lansbury, *The Old Brown Dog: Women, Workers, and Vivisection in Edwardian England*, University of Wisconsin Press, Madison 1985; Nicolaas A. Rupke (ed.), *Vivisection in Historical Perspective*, Croom Helm, London 1987; Mary Ann Elston, "Women and Antivivisection in Victorian England, 1870-1900", in Rupke (ed.), *Vivisection in Historical Perspective* cit., pp. 259-294; Hilda Kean, "The 'Smooth Cool Men of Science': The Feminist and Socialist Response to Vivisection", in *History Workshop Journal*, vol. 40, no. 1 (1995), pp. 16-38; Craig Buettinger, "Women and Antivivisection in Late Nineteenth-century America", in *Journal of Social History*, vol. XXX (1997), pp. 857-872.

[71] On ecofeminism see more below.

> that it has since become an umbrella term for bringing together scholars who do critical research on human–animal relations[72].

Related to ecofeminism's concern with nature also the knot between animals, gender and nature has been explored to a large extent[73], nowadays also with a direct reference to climate change and ecological crisis[74]. Then, the explicit coinage of the term "CAS" and its explicit commitment with intersectional analysis and politics makes a further link with feminism and critical race studies[75], queer studies[76], disability studies[77]. In doing so, CAS clarifies, in order to counteract it, how the material and symbolic exploitation of animals intersects with the dominant categories of gender, "race", class, sexuality and various forms of embodied difference and helps to maintain them and vice versa.

Today, in 2020, the term "intersectionality" is largely widespread and has entered the mainstream discussion, sometimes in a vague or misused vein. The term was coined in 1989[78] by the law scholar, critical race theory scholar, and black feminist, Kimberlé Williams Crenshaw in order to account for the intertwining of racial and gender discrimination with specific reference to the insufficiency of U.S. anti-discrimination laws to address discrimination

[72] Taylor and Twine, "Locating the 'Critical' in Critical Animal Studies" cit., p. 4.
[73] See e.g. Greta Gaard (ed.), *Ecofeminism: Women, Animals, Nature*, Temple University Press, Philadelphia 1993; Carol J. Adams and Lori Gruen (eds.), *Ecofeminism: Feminist Intersections with Other animals and the Earth*, Bloomsbury Publishing, New York 2014.
[74] Greta Gaard, "Ecofeminism and Climate change", in *Women's Studies International Forum*, vol. 49 (2015), pp. 20-33.
[75] See e.g. A. Breeze Harper, *Sistah vegan: Black Female Vegans Speak on Food, Identity, Health, and Society*, Lantern Books, New York 2010; Maneesha Deckha, "Toward a Postcolonial, Posthumanist Feminist Theory: Centralizing Race and Culture in Feminist Work on Nonhuman Animals", in *Hypatia*, vol. 27, no. 3 (2012), pp. 527-545; Claire Jean Kim, *Dangerous Crossings: Race, Species, and Nature in a Multicultural Age*, Cambridge University Press, Cambridge 2015; Aph Ko and Syl Ko, *Aphro-ism: Essays on Pop Culture, Feminism, and Black Veganism from Two Sisters*, Lantern Books, New York 2017.
[76] See Simonsen Rasmus Rahbek, "A Queer Vegan Manifesto", in *Journal for Critical Animal Studies*, vol. 10, no. 3 (2012), pp. 51-81; Jovian Parry, "From Beastly Perversions to the Zoological Closet: Animals, Nature, and Homosex", in *Journal for Critical Animal Studies*, vol. 10, no. 3 (2012), pp. 7-25; Massimo Filippi and Marco Reggio (eds.), *Corpi che non contano. Judith Butler e gli animali*, Mimesis, Milano-Udine 2015.
[77] See Stephanie Jenkins *et al.* (eds.), *Disability and Animality: Crip Perspectives in Critical Animal Studies*, Routledge, London 2020; Sunaura Taylor, *Beasts of Burden: Animal and Disability Liberation*, The New Press, New York 2017.
[78] Kimberlé Crenshaw, "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics", in *University of Chicago Legal Forum* (1989), pp. 139-167.

against black women. It is therefore widely believed that intersectional theory sinks its own origins in academia and that it is somehow divorced from contexts of militant activism. Actually, the need to grasp the specificity of the oppression of black women, also in explicit relation with class (which, instead, is absent in Crenshaw seminal work of 1989), in face of the failure both of feminism and anti-racist discourse, had already been warned and addressed since the 1970s, and even before[79] by black women activists and collectives, such as, among others, Angela Davis, The Combahee River Collective, bell hooks, Debora King[80].

The concept of intersectionality has experienced in recent years an unprecedented spread, so much to become a keyword for contemporary movements and critical social theories. Intersectionality is today a tool of investigation and struggles even beyond the original "oppression pair" – ethnicity and gender – considering as categories of analysis and axes of power, for example, class, sexual orientation, ability, species, religion, etc. The intersectional perspective, emerging as a critique of radical and white essentialist feminism, accused of creating an abstraction – the woman understood as a universal or a mythical "Other" or "Absent" – focuses from the beginning on hierarchies and experiential differences determined by the multiple, simultaneous and sometimes contradictory interconnection of various kind of oppression. It is famous the metaphor of the crossroad introduced by Crenshaw in order to try to account for this aspect:

> Consider an analogy to traffic in an intersection, coming and going in all four directions. Discrimination, like traffic through an intersection, may flow in one direction, and it may flow in another. If an accident happens in an intersection, it can be caused by cars traveling from any number of directions and, sometimes, from all of them. Similarly, if a Black woman is

[79] The 1949 essay of Claudia Jones, an activist of the Communist Party USA and a black national feminist, entitled *An End to the Neglect of the Problems of the Negro Woman!* (Claudia Jones, "An End to the Neglect of the Problems of the Negro Woman!", in *Political Affair*, vol. 28 (1949), pp. 51-67) can be considered as the forerunner of intersectional analysis. In this article, she underlines how the simultaneity of class exploitation, gender and racial oppression which black women suffer places them at the lower step of the social hierarchy.
[80] See Angela Davis, "Reflections on the Black Woman's Role in the Community of Slaves", in *The Massachusetts Review*, vol. 13, no. 1/2 (1972), pp. 81-100; Angela Davis, *Women, Race and Class*, Random House, New York 1981; Combahee River Collective, "The Combahee River Collective Statement", in *All the Women Are White, All the Blacks Are Men, but Some of Us Are Brave: Black Women's Studies*, ed. by Akasha Gloria Hull *et al.*, Feminist Press Books, Westbury 1982, pp. 13-22.

> harmed because she is in the intersection, her injury could result from sex discrimination or race discrimination[81].

Another simple methodology of recognizing the idea of the interconnectedness of oppression is to "asking the other question", as proposed by Mari J. Matsuda 1991:

> When I see something that looks racist, I ask, 'Where is the patriarchy in this?' When I see something that looks sexist, I ask, 'Where is the heterosexism in this?' and when I see something that looks homophobic, I ask, 'Where are the class interests in this?'[82].

Thus, this approach analyzes and stresses the complexity and simultaneity of the interplay of multiple power differentials. And it does so both from an individual point of view, focusing on the identity narratives of oppressed subjects and groups, on their lived experiences, intending to show the social multidimensionality inherent in the processes of subjectivation; and from a systemic point of view, in relation to broader socio-cultural discourses, focusing on the mechanisms, the conditions and the structural construction and maintenance of power and oppression. In order to refer to these two different, but interrelated, levels of analysis, respectively the micro-level and the macro-level, Patricia Hill Collins, echoing the Combahee River Collective Statement, has proposed to introduce beside the notion of intersectionality – to be used for the description and investigation of micro-level processes – the concept of «interlocking systems of oppression»[83]. Another way in which this difference in levels has been indicated is the distinction between two "camps"[84]: one adopting an "additive" or "cumulative" model (corresponding to the micro-level) and the other one adopting a "constitutive" model (corresponding to the macro-level). Such models, then, can be matched with different epistemological attitudes that have been classified into *anticategorical* (the deconstructivist rejection of social categories), *intracategorical* (aim at complicating categories rather than

[81] Crenshaw, "Demarginalizing the Intersection of Race and Sex" cit., p. 149.
[82] Mari J. Matsuda, "Beside My Sister, Facing the Enemy: Legal Theory Out of Coalition", in *Stanford Law Review*, vol. 43, no. 6 (1990), pp. 1183-1192, p. 1189.
[83] Patricia H. Collins *et al.*, "Symposium on West and Fenstermaker's "Doing Difference"", in *Doing Gender, Doing Difference. Inequality, Power, and Institutional Change*, ed. by Sarah Fenstermaker and Candace West, Routledge, London 2002, pp. 81-95, p. 82.
[84] Nira Yuval-Davis, "Intersectionality and Feminist Politics", in *European Journal of Women's Studies*, vol. 13, no. 3 (2006), pp. 193-209.

eliminate them, being focused on social groups at previously ignored node of intersection) and *intercategorical* (a strategic and provisional acceptance of existing social categories in order to map configurations of inequality)[85]. The micro-level, combined with additive camp and with inter and intra-categorical approaches, considers the different social categories – that identify as many axes of oppression – as pre-existing and trans-historical and focuses on the ways in which they intersect under certain conditions to give rise to multi-marginalized individuals and groups. Given this, the micro-level analyses, representative of the vast majority of the works that fit within the "paradigm"[86] of intersectionality are typically conducted on case studies, characterized, therefore, by empirical investigations which aim to identify, describe and document the relations of oppression at stake in a given historical-social context. The macro-level analyses, on the other hand, aim, at least in principle, at explaining the why and the how, the emergence, dynamics, and reproduction of the forms of subordination – thus questioning existing social categories, hence their anti-categoriality –.

The constitutive camp maintains that categories do not pre-exist and *then* intersect, rather categories are conceived as constantly produced and (re)invented through each others in a relational *process*[87]. Thus, this model is oriented toward broader theorizing of power relations, with some authors within this camp also stressing the idea of an integral connection – an interlocking – between oppressions as «part of one overarching structure of domination»[88], or as «connected» within a «larger picture»[89], or again, as related to a wider «landscape of power»[90]. The constitutive model is aware of the problems inherent to the tendency of additive camp tendency to impose categorial stability and to reify any given configuration of

[85] Leslie McCall, "The complexity of Intersectionality", in *Signs: Journal of Women in Culture and Society*, vol. 30 (2005), pp. 65-92.
[86] Gabriele Winker and Nina Degele, "Intersectionality as Multi-Level Analysis: Dealing with Social Inequality", in *European Journal of Women's Studies*, vol. 18, no. 1 (2011), pp. 51-66; Wendy Hulko, "The time-and Context-Contingent Nature of Intersectionality and Interlocking Oppressions", in *Affilia*, vol. 24, no. 1 (2009), pp. 44-55.
[87] See, for example, Yuval-Davis, "Intersectionality and Feminist Politics" cit., p. 195.
[88] Patricia H. Collins, *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*, Routledge, London 2002, p. 222.
[89] Rita Kaur Dhamoon, "Considerations on Mainstreaming Intersectionality", in *Political Research Quarterly*, vol. 64, no. 1 (2011), pp. 230-243, pp. 238-239.
[90] Floya Anthias, "Hierarchies of Social Location, Class and Intersectionality: Towards a Translocational frame", in *International Sociology*, vol. 28, no. 1 (2013), pp. 121-138, p. 130.

differences. As Yuval-Davis asserts in relation to the triple oppression of black and working-class women:

> Any attempt to essentialize 'Blackness' or 'womanhood' or 'working classness' as specific forms of concrete oppression in additive ways inevitably conflates narratives of identity politics with descriptions of positionality as well as constructing identities within the terms of specific political projects. [. . .] in such identity politics constructions what takes place is actually fragmentation and multiplication of the wider categorical identities rather than more dynamic, shifting and multiplex constructions of intersectionality[91].

The additive model falls into the discourse of identity politics and thus embraces the correspondence between positioning and social grouping. Therefore it fragments and multiplies identities because it tends to concentrates solely on the symbolic/discursive modes of construction and representation of difference as identity, either to criticize or to affirm them[92]. This way an important question is missed, a question which, on the contrary, the constitutive perspective makes explicit:

> [. . .] are there, in any particular historical condition, specific and limited numbers of social divisions that construct the grid of power relations within which the different members of the society are located[93]?

Broadly speaking, thus, the intersectional approach appears as an inclusive framework with a dynamical and multi-layered view of society, oppression, and subjectivity. A framework that, at least in some of its more mature versions (i. e. anti-categorical, macro-level, constitutive perspective), can challenge essentialist, binary and reductionist fallacies, both from the theoretical point of view and the political activism one. Insisting on the multiple simultaneity of oppressions, indeed, means, at the same time, bringing to light and problematizing the *privileges* that are their necessary complement and that are often taken for granted. Such operation and the effort to understand why and how these oppressions are strongly connected are essential for the construction of political solidarity between different oppressed groups that is authentic, solidly founded and fruitful. If we add

[91] Yuval-Davis, "Intersectionality and Feminist Politics" cit., p. 195.
[92] See Nancy Fraser, *Justice Interruptus: Critical Reflections on the "Post-Socialist" Condition*, Routledge, New York 1997.
[93] Yuval-Davis, "Intersectionality and Feminist Politics" cit., pp. 202-203.

to this undoubted advantage the fact that intersectionality is neither too complicated nor too simple and that it allows a cross investigation of problems of various theoretical origins through a wide range of methodological approaches, we understand its success today, its ability to attract a wide audience from the whole feminist spectrum and critical social theory in general.

However, from its first appearance on the academic and political scene, intersectionality has been reviewed and criticized, both from its inside and its outside. In addition to a certain lack of methodological clarity and application difficulties of such a broad and open approach – a flaw partly solved thanks to the development of more rigorous methodologies[94] – the most problematic aspect to be questioned is its *theoretical consistency*. In other words, what is lacking is the elaboration of a robust theory of social complexity accompanied by the investigation of a systemic and unitary logic that aims to explain the structural processes of formation and reproduction of intersecting, enmeshed oppressions.

If this explanatory requirement is deliberately left aside by the works in the additive camp of the intersectional paradigm, it is not adequately satisfied even within the so-called constitutive camp, oriented instead to the why. These works, while suffering less from the fragmentary and static nature of the others and while adopting, at least in their intent, a unified perspective, continue to under-theorize the social. In other words, intersectionality seems to lack a consistent social and power theory.

As it has been rightly pointed out by the Marxist feminist current of social reproduction theory[95], such approaches consider the broader power relations that inform the social context as something indeterminate, discreet and chaotic, as composed of «ever-variable configurations (or 'matrixes') of partial relations, reproduced in the absence of any essential or systemic

[94] Winker and Degele, "Intersectionality as Multi-Level Analysis" cit.
[95] See Barbara Laslett and Johanna Brenner, "Gender and Social Reproduction: Historical Perspectives", in *Annual Review of Sociology*, vol. 15, no. 1 (1989), pp. 381-404; Sue Ferguson, "Building on the Strengths of the Socialist Feminist Tradition", in *Critical Sociology*, vol. 25, no. 1 (1999), pp. 1-15; Isabella Bakker, "Social Reproduction and the Constitution of a Gendered Political Economy", in *New Political Economy*, vol. 12, no. 4 (2007), pp. 541-556; Cinzia Arruzza, "Functionalist, Determinist, Reductionist: Social Reproduction Feminism and Its Critics", in *Science & Society*, vol. 80, no. 1 (2016), pp. 9-30; Tithi Bhattacharya (ed.), *Social Reproduction Theory. Remapping Class, Recentering Oppression*, Pluto Press, London 2017.

logic»[96]. Dhamoon, for instance, refers to the «larger picture in which differences are connected», we have previously mentioned, as «represent[ing] the shifting, messy, indeterminate, dynamic, and multilayered movement of difference making»[97]. Evidently, such a conception merely alludes to the existence of a unitary logic but does not take a step forward in identifying and clarifying it.

1.2.1 Ecofeminism: a cultural logic for intersectionality

Long before the concept of intersectionality was explicitly defined, another perspective within the galaxy of feminisms worked in a way that today we would call for all intents and purposes intersectional, we are speaking of ecofeminism.

The term ecofeminism was coined by the French feminist Francois d'Eaubonne in 1974[98] with reference to the idea that women can play a fundamental role in an ecological revolution and indicates – or according to some scholars used to indicate[99] – the social, political, and theoretical *movement* that started from this idea, and that arose from the intersection of radical feminist research, social justice movements, environmentalism, pacifism.

Back in 1970s "ecofeminism" did not label a coherent body of theories, but more generically was related to the analysis of the theoretical and practical connections between sexism and the domination of nature in Western culture, investigated from various disciplinary perspectives: above all history and sociology, but also political science, literary criticism and theology. Only since the late 1980s, ecofeminism has also become an academic discourse, not a unitary one at all, rather, so heterogeneous as to

[96] Susan Ferguson, "Intersectionality and Social-Reproduction Feminisms", in *Historical Materialism*, vol. 24, no. 2 (2016), pp. 38-60, p. 45.
[97] Dhamoon, "Considerations on Mainstreaming Intersectionality" cit., pp. 238-239.
[98] Françoise d'Eaubonne, "The Time for Ecofeminism", in *Ecology*, trans. by Ruth Hottell, Humanities Press, New Jersey 1994, pp. 174-197.
[99] Ecofeminism underwent an academization process which has led it to be "colonized" by philosophical positions. At the same time, this process has led to a separation between theory and practice due to the weakening of the activist instance and the slipping into the background of ecofeminism as a social, political, and theoretical movement in favor of a static conception that ends up favoring white academic feminism. See on this Julie Cook, "The Philosophical Colonization of Ecofeminism", in *Environmental Ethics*, vol. 20, no. 3 (1998), pp. 227-246.

make preferable the plural, "ecofeminisms", compared with the singular.

Anyways, broadly speaking, one can say that what today is called "ecofeminist philosophy"[100] is commonly characterized by: the investigation of the connections between the domination of women and nature; the critique of the representation of these subjects proposed by the male-biased Western philosophical tradition in order to create alternative visions to this model. The focus is therefore on the analysis of the structures and functioning of domination. This is an all-round analysis, that is, not only from a conceptual point of view but also from a linguistic, historical, socio-economic, political, epistemological, ethical point of view, thus giving rise to the long list of ecofeminisms mentioned above, including ethical[101], materialist/socialist[102], cultural/spiritual[103], queer[104], phenomenological ecofeminism[105], etc.

The so-called vegetarian or animal ecofeminism (as an autonomous branch of ecofeminism, or as an another item on the ecofeminisms' list) needs a separate mention[106]. In fact, it can be said that the reference to

[100] Karen J. Warren, "Feminist Environmental Philosophy", in *The Stanford Encyclopedia of Philosophy*, ed. by Edward N. Zalta, Summer 2015, `https://plato.stanford.edu/archives/sum2015/entries/feminism-environmental/`.

[101] See, for example, Josephine Donovan and Carol J. Adams (eds.), *The Feminist Care Tradition in Animal Ethics: A Reader*, Columbia University Press, New York 2008; Lori Gruen, *Ethics and Animals: An Introduction*, Cambridge University Press, Cambridge 2011; Marti Kheel, *Nature Ethics: An Ecofeminist Perspective*, Rowman & Littlefield, Lanham 2007; Christine Cuomo, *Feminism and Ecological Communities: An Ethic of Fluorishing*, Routledge, London 1998.

[102] See, for example, Val Plumwood, "Feminism and Ecofeminism: Beyond the Dualistic Assumptions of Women, Men and Nature", in *The Ecologist*, vol. 22, no. 1 (1992), pp. 8-13; Mary Mellor, *Feminism and Ecology*, Polity Press, Cambridge 1997; Mary Mellor, "Feminism and Environmental Ethics: A Materialist Perspective", in *Ethics and the Environment*, vol. 5, no. 1 (2000), pp. 107-123; Ariel Salleh, *Ecofeminism as Politics: Nature, Marx and the Postmodern*, Zed Books Ltd., London 1997.

[103] See, for example, Starhawk, *Power, Authority, and Mystery: Ecofeminism and Earth-Based Spirituality*, ed. by Irene Diamond and Gloria F. Orenstein, San Francisco 1990; Riane Eisler, "The Gaia Tradition and the Partnership Future: An Ecofeminist Manifesto", in Irene Diamond and Gloria F. Orenstein (eds.), *Reweaving the World: The Emergence of Ecofeminism*, Sierra Club Books, San Francisco 1990, pp. 23-34.

[104] Greta Gaard, "Toward a Queer Ecofeminism", in *Hypatia*, vol. 12, no. 1 (1997), pp. 114-137; Catriona Sandilands, "Mother Earth, the Cyborg, and the Queer: Ecofeminism and (More) Questions of Identity", in *National Women's Studies Association (Nwsa) Journal*, vol. 9, no. 3 (1997), pp. 18-40.

[105] Trish Glazebrook, *Eco-Logic: Erotics of Nature. An Ecofeminist Phenomenology*, State University of New York Press, Albany 2008.

[106] For a detailed review of vegetarian ecofeminism see Greta Gaard, "Vegetarian Ecofeminism: A Review Essay", in *Frontiers: A Journal of Women Studies*, vol. 23, no. 3 (2002),

animal issues has been implicitly present since the beginning of ecofeminist research – if only as part of the wider discourse on the domination of nature –. However, during the mid 1970s the vast amount of analyses on species oppression, and its intersection with gender oppression and race oppression, was carried on in the context of second-wave radical feminism, along with lesbian feminism. Inside this context, Carol Adams' *The Oedible Complex*[107], published in 1975, was the first lesbian feminist study on women's vegetarianism also suggesting a conceptual link between sexism and speciesism in Western culture. Such claim, then, was deepened more widely by the same Adams in her 1990 fundamental essay *The Sexual Politics of Meat*[108].

Hence, initially, inside ecofeminism the domination of animals was thematized in itself and from an antispeciesist point of view only marginally, making its appearance with an article, entitled *All and One Flesh: The Rights of Animals*[109] inside a major ecofeminist anthology of 1983, *Reclaim the Earth: Women Speak Out for Life on Earth*. Almost a decade after, the anthology on ecofeminism *Reweaving the World* (1990) featured essays critiquing the practices of sacrifice and hunting[110]. A momentum to a more substantial convergence between ecofeminism and antispeciesism stemmed from the fact that some voices of vegetarian feminism chose to embrace and build upon ecofeminism, as their «analysis shifted from the objects of oppression to the structure of oppression»[111]. This is the case of Adams herself and, among others[112], Susan Griffin whose *Women and Nature* (1978) had been

pp. 117-146.

[107] Carol J. Adams, "The Oedible Complex: Feminism and Vegetarianism", in *The Lesbian Reader*, ed. by Gina Covina and Laurel Galana, Amazon Press, Oakland 1975, pp. 145-52.

[108] Carol J. Adams, *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory*, Continuum Books, New York 1990.

[109] Norma Benney, "All of One Flesh: The Rights of Animals", in *Reclaim the Earth: Women Speak Out for Life on Earth*, ed. by Leonie Caldecott and Stephanie Leland, Women's Press, London 1983, pp. 141-151.

[110] Respectively: Sally Abbott, "The Origins of God In the Blood of the Lamb", in Diamond *et al.* (eds.), *Reweaving the World* cit., pp. 35-40 and Marti Kheel, "Ecofeminism and Deep Ecology: Reflections on Identity and Difference", in Diamond *et al.* (eds.), *Reweaving the World* cit., pp. 128-137.

[111] Gaard, "Vegetarian Ecofeminism" cit., p. 128.

[112] Gaard (*ibid.*, pp. 126-127) mentions two other ecofeminist texts in content, but not yet in name: Elizabeth Dodson Gray, *Green Paradise Lost*, Roundtable Press, Wellesley 1981 and Andrée Collard and Joyce Contrucci, *Rape of the Wild: Man's Violence against Animals and the Earth*, Indiana University Press, Bloomington 1989.

very influential for the vegetarian branch of ecofeminism, though the book is not labeled as an ecofeminist text. Both of them embrace ecofeminism as a term in 1991[113]. Vegetarian ecofeminism, as a term and as a branch, born two years later thanks to Greta Gaard's anthology *Ecofeminism: Women, Animals, Nature*. As Gaard herself retrospectively explains:

> The convergence of feminist vegetarianism and ecofeminism, as if following a simple algebraic operation, combined the equation "ecofeminism = women + nature" with "women + animals", and appeared in the first text of vegetarian ecofeminism in my *Ecofeminism: Women, Animals, Nature*[114].

Animal ecofeminism has provided indispensable contributions to antispeciesist reflection and CAS. Just to give some of the most important examples: the concepts of "absent referent" and "mass term" developed by Carol Adams; the criticism of universalism and the contextual approach to vegetarianism/veganism[115]; the intersectional approach to power relations and structures of oppressions; the central role of the dimension of the body as a basis able to ground a more-than-human ethics of care.

After a period of popularity and big activist commitment between the 1980s and 1990s, ecofeminism, as a social and theoretical movement, suffered a major backlash at the beginning of the new century and an almost total exit from the scene from 2010 onwards, even in its most advanced versions and reinterpretations[116]. This trajectory is consistent, on the one hand, with the weakening of the ecological, pacifist, anti-nuclear movement and, on the other hand, with the progressive affirmation, within the feminist horizon, of the post-structuralist critique of identity

[113] See Carol J. Adams, "Ecofeminism and the Eating of Animals", in *Hypatia*, vol. 6, no. 1 (1991), pp. 125-145 and David Macauley, "On Women, Animals and Nature: An Interview with Ecofeminist Susan Griffin", in *American Philosophical Association Newsletter on Feminism and Philosophy*, vol. 90, no. 3 (1991), pp. 116-27.
[114] Gaard, "Vegetarian Ecofeminism" cit., p. 128.
[115] See Richard Twine, "Ecofeminism and Veganism: Revisiting the Question of Universalism", in Adams *et al.* (eds.), *Ecofeminism* cit., pp. 191-207 and Deane Curtin, "Toward an Ecological Ethic of Care", in *Hypatia*, vol. 6, no. 1 (1991), pp. 60-74.
[116] Greta Gaard, "Ecofeminism Revisited: Rejecting Essentialism and Re-placing Species in a Material Feminist Environmentalism", in *Feminist Formations*, vol. 23, no. 2 (2011), pp. 26-53. For another historical overview see Laura Hobgood-Oster, "Ecofeminism: Historic and International Evolution", in *Encyclopedia of Religion and Nature. Vol* 1, ed. by Bron R. Taylor, Continuum Books, London 2005, pp. 533-538 and for a more detailed account of the trajectory of ecofeminist political activism see Noel Sturgeon, *Ecofeminist Natures: Race, Gender, Feminist Theory and Political Action*, Routledge, London 2016.

essentialism. Indeed, essentialism, albeit differentiated in degree and awareness, characterizes part of the ecofeminist production and has been the main point of criticism (besides the accusations of ethnocentrism and mysticism) – both from the inside and the outside – and reason for its rejection. So much so that, in order to avoid the association with the essentialism now immediately evoked by the term "ecofeminism", there has been a flourishing of alternative names to indicate the work on the intersections between feminism and the environment such as "ecological feminism"[117], "feminist environmentalism"[118] or "critical feminist eco-socialism"[119] or simply "gender and the environment".

Alongside many valuable field studies aimed at determining existing interactions between two or more forms of oppression in specific socio-cultural contexts, the ecofeminist reflection has endeavored to thematize a unitary, systemic logic to account for the reasons why the oppressions actually intersect, remain stable and reproduce in certain ways. In short, that logic of which the intersectional approach, strictly speaking, seems to be missing. In particular, the more thorough and complete investigation in this direction is due to the work of Australian philosopher Val Plumwood. In her most important book, *Feminism and the Mastery of Nature*[120], published in 1993, which later became a classic of ecofeminism, Plumwood identifies this logic with Western dualism, e.g. reason/nature, culture/nature, mind/body, masculine/feminine, reason/emotion, human/animal, etc. Plumwood traces the cultural history of this system of thought – from the Greek philosophy of Plato and Aristotle to contemporary mechanism/behaviorism, passing for Descartes – and she analytically identifies its features. Dualism, according to this analysis, is more than just dichotomous opposition, more than a relation of difference or non-identity. It is a conceptual scheme that constructs interrelated and mutually reinforcing binary oppositions based on a hierarchical logic. Dualism converts what is simply a logical correlation of difference, which is given in a gradual

[117] Karen J. Warren, *Ecological Feminism*, Routledge, London 1994.
[118] Bina Agarwal, "The Gender and Environment Debate: Lessons from India", in *Feminist studies*, vol. 18, no. 1 (1992), pp. 119-158.
[119] Val Plumwood, "Integrating Ethical Frameworks for Animals, Humans, and Nature: A critical Feminist Eco-Socialist Analysis", in *Ethics & the Environment*, vol. 5, no. 2 (2000), pp. 285-322.
[120] Val Plumwood, *Feminism and the Mastery of Nature*, Routledge, London 2002.

continuum of similarity, in a subordinating opposition between already given and static objects, utilizing a hypostatization process. As Plumwood puts it:

> Dualism is a relation of separation and domination inscribed and naturalised in culture and characterised by radical exclusion, distancing and opposition between orders constructed as systematically higher and lower, as inferior and superior, as ruler and ruled, which treats the division as part of the natures of beings construed not merely as different but as belonging to radically different orders or kinds, and hence as not open to change[121].

Plumwood presents the main intersecting Western dualisms by means of a list[122]. This way two manners of reading it are possible. A horizontal reading of the pair involves a hierarchy with the left-hand side terms being culturally valued in opposition to those on the right (e.g. culture/nature, mind/body: culture > nature; mind > body). A vertical reading maps, on the left side, interconnected and mutually reinforcing cultural hegemonies and, on the right side, interconnected and mutually devaluating categories (e.g. culture-mind/nature-body). Plumwood specifies the inter-relation between dualistic pairs with the notion of «linking postulates» that are «assumptions normally made implicit in the cultural background which create equivalences or mapping between the pairs»[123]. Such postulates include the notion of men as more "rational", of humans being uniquely social (cultural), or of the body as passive. The repetition of reason/nature dualism throughout the majority of these pairs serves to solidify the culturally constructed identities or essences implied by these horizontal hierarchies and vertical mappings.

It has to be noticed here that contextual discursive transformations take place; for example, nature can be harvested by dominant groups for conceptual resources (e.g. aggressiveness, competitiveness) with which to construct their identities. Therefore, the whole structure needs to be thought of as fluid, at least at certain degrees, likely to be modified with the introduction of new dualisms[124].

[121] *ibid.*, pp. 47-48.
[122] See *ibid.*, p. 43.
[123] *ibid.*, p. 45.
[124] See on this point Richard Twine, "Ecofeminisms in Process", in *Ecofeminism e-journal* (2001).

Plumwood goes further and detects the «logical structure of dualism» characterized by five features[125].

1. *Backgrounding (denial)*: the culturally and contextually dominant concepts are considered as if they formed a singular, centered reality while denying their actual dependence on relational opposites;
2. *Radical exclusion (hyperseparation)*: some characteristics (e.g. language in the human/animal distinction) are mobilized to mean a polarized difference between two realms, in order «to maximise distance or separation between the dualised spheres and to prevent their being seen as continuous or contiguous»[126];
3. *Incorporation (relational definition)*: the devalued concept is defined only in relation to its opposite, thus in terms of lack and absence and according to opposite's categories, rather than its own ones. It is therefore incorporated into its system;
4. *Instrumentalism (objectification)*: the devalued concept is made passive and conceived as having no end in itself; given the process of incorporation, its objectives are also defined in terms of those of the opposite pole;
5. *Homogenization or stereotyping*: differences within the devalued pole are denied, "they are all alike" motto.

Moreover, according to Plumwood[127], the way of being constructed as other that characterizes dualisms has a logical pattern and corresponds to the representation of otherness in classical propositional logic, that is to say, classical negation. Thus, through a logical analysis of classical negation, she gives formal expression to the five features of dualism she has previously specified.

Now, if, on the one hand, ecofeminism has been successful in identifying an integrated and unitary logic – although some inaccuracies[128] –, so that

[125] Plumwood, *Feminism and the Mastery of Nature* cit., pp. 47-55.
[126] *ibid.*, p. 49.
[127] *ibid.*, pp. 55-59.
[128] Twine highlights some contradictions in the list of dualisms, especially in its enriched version by Gaard which includes also pairs referring to sexualities (e.g. heterosexual/queer, production/reproduction)[129]. "Queer sexualities" vertically maps with "reproduction", but it is not the case that queer people are being devalued via this association, rather it is the other way round: queer people are being devalued by being portrayed as non-reproductive. Thus, not each term perfectly maps onto any others. In this case, queer

one can refer to it in order to subtract the intersectional approach to the criticism of theoretical inconsistency, on the other hand, since ecofeminism moves in the field of culture, *epistème* and the logical construction of concepts, it continues to under-theorize the social[130]. And this is not a problem of little importance if the intersectional framework is to respond effectively to request for transformative politics based on cross-movement political solidarity, as it aims to do and as implied by its own theoretical premises. Indeed, «how we conceptualise the social matters in developing effective political strategies»[131]. A cultural logic, therefore, is not enough to make intersectionality a substantial element of critical theories; we need a «socio-material logic»[132], a macro-logic of social complexity in order to grasp how and why the interlocking of oppressions happens in the ways that it happens, that is in order to investigate whether and how this logic conditions and limits particular configurations of multiply-oppressive experiences.

1.3 CAS and the social: anti-capitalist readings

It can be said that a general, materialistic orientation toward the social is another key feature of CAS, in its original not only being concerned with the question of the animal, but also with the *condition* of the animal[133], thus with a direct focus on the treatment of animals inside our society – embedded in institutions, social routines, and daily habits – with the explicit goal to overcome it and support social change. CAS, as we have seen, is overtly an *engaged* theory:

sexualities are associated with nature, but via an association with nature's non-rational and "beastly" meanings. See Twine, "Ecofeminisms in Process" cit.

[130] The same criticism is made also by Cudworth who defines Plumwood's position idealist, i.e. focused on cultural discourses: «[her] understanding is ideational – we do not see how these ideas of separation, of human uniqueness and the animal as 'Other', are articulated in located contexts and inform what sociologists would understand as social institutions and related practices» (Erika Cudworth, "Beyond Speciesism: Intersectionality, Critical Sociology and the Human Domination of Other Animals", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 19-35, p. 27).

[131] Ferguson, "Intersectionality and Social-Reproduction Feminisms" cit., p. 42.

[132] *ibid.*, p. 43.

[133] Helena Pedersen and Vasile Stanescu, "What is "Critical" about Animal Studies? From the Animal "Question" to the Animal "Condition"", in Socha, *Women, Destruction, and the Avant-Garde: A Paradigm for Animal Liberation* cit., pp. ix-xi.

> In the CAS context, theory must be relevant to understanding and changing the material conditions of animals, and to historicising the still normative concepts that have been largely successful in shielding human–animal relations from critical scrutiny[134].

This feature is reflected in an orientation toward sociology within the CAS, given sociology's attentiveness to power issues in society[135]: «It is time for sociology to step up to the task of outlining the social institutions in which the discourse of species is embedded and to provide an analysis in terms of social relations»[136]. Since the beginning of CAS such analysis has been referred to economical processes because it is in their respect that the animal condition in contemporary society and human-animal relations are substantially consumed. In the aforementioned "founding act" of CAS the reference to economy appears at the first point of the list of CAS' tenets: «We seek to develop a Critical Animal Studies that: 1. Pursues interdisciplinary collaborative writing and research in a rich and comprehensive manner that includes perspectives typically ignored by animal studies such as political economy»[137]. The inclusion of an economical perspective is, then, immediately characterized as oriented toward, and guided by, a commitment to anti-capitalism (vaguely intended): «[CAS] reject apolitical, conservative, and liberal positions in order to advance an anti-capitalist, and, more generally, a radical anti-hierarchical politics»[138]. Since such anti-capitalist commitment «sociology has made a most useful contribution in the theorising of human relations with non-human animals in terms of Marxian influenced analyses»[139]. The idea is that the «critique of capitalism [is] inseparable from a critique of both animal commodification and environmental destruction»[140].

Marxian influenced analyses of contemporary capitalism conducted

[134] Taylor and Twine, "Locating the 'Critical' in Critical Animal Studies" cit., p. 6.
[135] For a detailed account of the relation between (critical) sociology and CAS see Twine, *Animals as Biotechnology* cit., pp. 3-9; Cudworth, "Beyond Speciesism" cit.; Kay Peggs, "From Centre to Margins and Back Again: Critical Animal Studies and the Reflexive Human Self", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 56-71.
[136] Cudworth, "Beyond Speciesism" cit., pp. 26-27.
[137] Best *et al.*, "Introducing Critical Animal Studies" cit.
[138] *ibid.*
[139] Cudworth, "Beyond Speciesism" cit., p. 27.
[140] Twine, *Animals as Biotechnology* cit., p. 9.

from the perspective of CAS[141] deal with such questions like, for example:

> What would global capitalism look like minus the exploitation of animal reproductive labour? How does that abuse intersect, in specific contexts, with that of human labour? And how can the disavowal of violence against animals illuminate, generally, theories of commodity fetishism?[142]

Whether the answers conceptualize exploited animals in capitalism as commodities[143], or wage labourers[144], or slaves[145], or superexploited commodities[146], or as super-exploited means of production[147], or as producing value in the form of biocapital[148], in their respect holds true the charge of economical reductionism. All these analyses, adopt, implicitly or not, a tripartite model of the animal oppression, which is best expressed by Nibert: first there is capitalist economic exploitation for human interests, then this power inequality is coded in law which allows exploitation, and finally from economic institutions and practices emerges a legitimizing ideology – speciesism –, a set of cultural beliefs that inspires discrimination[149]. This way, they fail to account for social intersectionality of species oppression[150]

On the other hand, we can say that where the general framework is adequately articulated to account for the intersectionality of species oppression,

[141] Nibert, *Animal Rights/Human Rights: Entanglements of Oppression and Liberation* cit.
[142] Taylor and Twine, "Locating the 'Critical' in Critical Animal Studies" cit., p. 10.
[143] Nibert, *Animal Rights/Human Rights: Entanglements of Oppression and Liberation* cit.; David Nibert, *Animal Oppression and Human Violence: Domesecration, Capitalism, and Global Conflict*, Columbia University Press, New York 2013.
[144] Hribal, "Animals Are Part of the Working Class Reviewed" cit.
[145] Painter, "Non-human Animals within Contemporary Capitalism: A Marxist Account of Non-Human Animal Liberation" cit.
[146] Torres, *Making a Killing: The Political Economy of Animal Rights* cit.
[147] Christian Stache, "Conceptualising Animal Exploitation in Capitalism: Getting Terminology Straight", in *Capital & Class*, vol. 44, no. 3 (2020), pp. 401-421.
[148] Nicole Shukin, *Animal Capital: Rendering Life in Biopolitical Times*, University of Minnesota Press, Minneapolis 2009; Agnieszka Kowalczyk, "Mapping Non-Human Resistance in the Age of Biocapital", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 183-200; Twine, *Animals as Biotechnology* cit.; Arianna Ferrari, "Nonhuman Animals as Food in Biocapitalism", in David Nibert (ed.), *Animal Oppression and Capitalism*, 2 vols., Praeger, Santa Barbara-Denver 2017, vol. 1, pp. 184-208. For a critique and an overcoming of this perspective and the previous ones, see Francesco Aloe, "Antropodecentrare *Il Capitale* di Marx. Dal lavoro astratto al processo di valorizzazione", in *Liberazioni. Rivista di critica antispecista*, no. 37 (2019), pp. 30-43 in which a coherent anthropo-de-centering of the first volume of *Capital* and the possibility to account for animals as labor-power is argued.
[149] See Nibert, *Animal Rights/Human Rights: Entanglements of Oppression and Liberation* cit., p. 17 ff.
[150] See for this criticism: Cudworth, "Beyond Speciesism" cit., pp. 27-28.

for example, adopting the concept of Animal-Industrial Complex (A-I C)[151], what is missing is an analysis of proper capitalist conditions, the general constraints of this complex and its unifying trait, i. e. that which makes it capitalist as such. The researches carried out within this framework are exquisitely sociological, empirically focused on institutions (governments, corporations, scientific related institutions, both public and private), technologies, practices, media representations, and their interconnections. In this respect, their focus is too narrow to account for the social from a more structural perspective.

Other authors within the field of CAS adopt a lesser empirically focused perspective in addressing capitalism, conceiving it not only as a mere economic system but as a social formation as a whole. They pose more structural questions such as: is it possible to achieve animal liberation without moving beyond capitalism? Is animal liberation compatible with capitalism? The answer, which coincides with a thesis, is summarized in the following quote by CAS scholar Sanbonmatsu: «Animal liberation and capitalism are in sum not merely in tension with one another, they are

[151] See, for example, Amy J. Fitzgerald and Nik Taylor, "The Cultural Hegemony of Meat and the Animal Industrial Complex", in Taylor *et al.* (eds.), *The Rise of Critical Animal Studies* cit., pp. 165-182; Kimberley Ducey, "The Chicken-Industrial Complex and Elite White Men: Connecting the Oppression of Humans and Other Animals", in Nibert (ed.), *Animal Oppression and Capitalism* cit., vol. 1, pp. 1-19; Tracey Harris, ""The Problem Is Not the People, It's the System": The Canadian Animal-Industrial Complex", in Nibert (ed.), *Animal Oppression and Capitalism* cit., vol. 1, pp. 57-75; Livia Boscardin, "Capitalizing on Nature, Naturalizing Capitalism: An Analysis of the "Livestock Revolution", Planetary Boundaries, and Green Tendencies in the Animal-Idustrial Complex", in Nibert (ed.), *Animal Oppression and Capitalism* cit., vol. 1, pp. 259-276. The concept of Animal Industrial Complex has been firstly proposed by anthropologist Barbara Noske (Noske, *Beyond Boundaries: Humans and Animals* cit.) and then refined by sociologist Richard Twine (Richard Twine, "Revealing the 'Animal-Industrial Complex' – A Concept and Method for Critical Animal Studies", in *Journal for Critical Animal Studies*, vol. 10, no. 1 (2012), pp. 12-39). It is understood as an organizing concept seeking to represent the overall framework of species domination in capitalist societies and its intersections with other complexes of the global economy such as "military-industrial complex", "prison-industrial complex", "entertainment-industrial complex" and "pharmaceutical-industrial complex" (see *ibid.*, pp. 16-20). A succinct definition of the A-IC is the following: «*a partly opaque and multiple set of networks and relationships between the corporate [. . .] sector, governments, and public and private science. With economic, cultural, social, and affective dimensions it encompasses an extensive range of practices, technologies, images, identities and markets*» (*ibid.*, p. 23). A-I C is internally structured into three overlapping main sectors: agribusiness, animal experimentation, entertaining-pet. A-I C concept and methodology are similar concerning their definition, function, and scope to the dimension of *dispositifs* which will be introduced below. Another problem of A-I C framework is that its critique of capitalism is, again, based on the critique of animal alienation.

mutually incompatible modes of civilizational development»[152].

1.3.1 CAS and the Frankfurt School

These analyses[153] make explicit reference to authors within the Western Marxism tradition (György Lukács, Karl Korsch, Ernst Bloch, the Frankfurt School, Antonio Gramsci, Henri Lefebvre, etc.)[154] employing, here and there, their conceptual tools. In so doing, just like the leftist animal rightist, they focus on the *Paris Manuscripts* and the concept of alienation, via the interpretation of Western Marxism which is based, in fact, on the humanist early works of Marx: alongside *The Economical-Philosophical Manuscripts of 1844* – published for the first time in 1832, *Theses on Feuerbach* and *The German Ideology*. This reading, which arose from the crisis of the socialist labor movement in the aftermath of the First World War and has its "founding" text in Lukács' 1923 *History and Class Consciousness*[155], conceptualizes Marx's approach as a critical revolutionary theory of social praxis – as we have seen –, against the worldview of traditional Marxism. As discussed above, the main reference for CAS are Frankfurt scholars, in particular Horkheimer, Adorno and Marcuse and their socio-anthropological-psychological investigation of the structural foundations of an "irrational society", just like

[152] Sanbonmatsu, "Introduction" cit., p. 26.
[153] See the essays in the collected volume Sanbonmatsu, *Critical theory and Animal Liberation* cit., especially: Zipporah Weisberg, "Animal Repression: Speciesism as Pathology", in Sanbonmatsu (ed.), *Critical theory and Animal Liberation* cit., pp. 177-193; Aaron Bell, "The Dialectic of Anthropocentrism", in Sanbonmatsu (ed.), *Critical theory and Animal Liberation* cit., pp. 163-175; Eduardo Mendieta, "Animal is to Kantianism as Jew is to Fascism: Adorno's Bestiary", in Sanbonmatsu (ed.), *Critical theory and Animal Liberation* cit., pp. 147-162; Christina Gerhardt, "Thinking With: Animals in Schopenhauer, Horkheimer, and Adorno", in Sanbonmatsu (ed.), *Critical theory and Animal Liberation* cit., pp. 137-146. And John Sanbonmatsu, "Capitalism and Speciesism", in Nibert (ed.), *Animal Oppression and Capitalism* cit., vol. 2, pp. 1-30; Maurizi, *Al di là della natura* cit.; Amy Buzby, "From Factory Floor to Killing Floor: Marx, Critical Theory and the Status of the Animal", in *Theory in Action*, vol. 8, no. 3 (2015), pp. 27-50; Melanie Bujok, "Zur Verteidigung des tierlichen und menschlichen Individuums. Das Widerstandsrecht als legitimer und vernünftiger Vorbehalt des Individuums gegenüber dem Sozialen", in *Das steinerne Herz der Unendlichkeit erweichen: Beiträge zu einer kritischen Theorie für die Befreiung der Tiere*, ed. by Susann Witt-Stahl, Alibri Verlag, Aschaffenburg 2007, pp. 310-343.
[154] Here again the reference is Elbe's classification, see Elbe, "Between Marx, Marxism, and Marxisms" cit. For the usage of the label "Western Marxism" see Perry Anderson, *Considerations on Western Marxism*, Verso Books, London-New York 2016.
[155] György Lukács, *History and Class Consciousness: Studies in Marxist Dialectics*, trans. by Rodney Livingstone, MIT Press, Cambridge 1972.

was their contemporary world conjuncture since the 1930s onward with the rise of authoritarianisms, the transformation of the Russian revolution in the Stalinist Soviet Union, the rise of National Socialism in Central Europe and the growth of American capitalism.

At the center of CAS's retrieval there is the theory of dominion elaborated in Horkheimer and Adorno's *Dialectic of Enlightenment. Philosophical Fragments*[156]. According to them, contemporary society is the apex of a process of civilization to be looked at with terror as it coincides with a process of unitary and increasingly total domination, and therefore, under the appearance of continuous progress – a semblance sustained by the effective evidence of cumulative growth of productive forces – as a process of regression of the human into barbarism. «The title that Adorno gives to this process is "retrogressive anthropogenesis"»[157] and its analysis relies on the concept of instrumental rationality, i.e. the objectifying thought subsuming the particular under the universal, the *metis* [cunning], the practical instrumental technical reason exemplified by Homeric Ulysses[158]. Its identity logic is seen as «the original model of domination, of which every other form of domination is merely derivative»[159]. Thus, the answer to the question on the existing state of affairs – the contemporaneity of different totalitarian power systems, the "irrational society" – begins and ends in the genealogical criticism of (instrumental) reason[160].

[156] The book, published in a mimeographed version in 1944 in the U.S. with the title *Philosophische Fragmente* and, then, as a printed version in Europe in 1947 with the complete title, had seen in its early stages of composition the collaboration of Marcuse (Enrico Giannetto, *Sguardi sul pensiero contemporaneo. Filosofia e scienze per cambiare il mondo*, libreriauniversitaria.it edizioni, Padova 2018, p. 204) which had to be interrupted because of the forced exile of the two scholars of Jew origin.

[157] Axel Honneth, *The Critique of Power: Reflective Stages in a Critical Social Theory*, trans. by Kenneth Baynes, MIT Press, Cambridge 1991, p. 38.

[158] To the interpretation of the figure of Ulysses as the ultimate example of bourgeois consciousness and instrumental rationality, and therefore to the identification of Enlightenment reason in the mythological poem, Horkheimer and Adorno devote the first of the two excursus we find in *Dialectic of Enlightenment*. In particular, in the episode of the Sirens within book XII of the *Odyssey*, the Frankfurt scholars identify the secret of the «intertwinement of myth, power, and labor» (Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment: Philosophical Fragments*, trans. by Edmund Jephcott, Stanford University Press, Stanford 2002. The translation is from Volume 5 of Max Horkheimer's collected work *Gesammelte Schriften: Dialektik der Aufklärung Und Schriften 1940-1950*, edited by Gunzelin Schmid Noerr, Verlag GmbH, Frankfurt am Main, 1987, p. 25).

[159] Honneth, *The Critique of Power* cit., p. 42.

[160] «We have no doubt – and herein lies our *petitio principii* – that freedom in society is inseparable from enlightenment thinking. We believe we have perceived with equal clarity,

Now, the analysis of rationality is conducted by the Frankfurt scholars with genealogical method, investigating its development in the prehistoric process of human self-affirmation on nature, in the process of anthropogenesis of the human, precisely. The argument of Horkheimer and Adorno sounds in synthesis as follows. Released from instinctual security, from animal immediacy with the environment, what the authors call «bodily adaptation to nature»[161], and moved by the drive of self-preservation, since prehistorical eras «human beings have always had to choose between their subjugation to nature and its subjugation to the self»[162]. The choice has always fallen on the second element of the conjunction, thus showing that the emergence of the human and the progress/regression of the whole civilization coincides with the process of *domination over nature*, which makes it all one with the process of *alienation from nature*[163]. Human estrangement from nature is fourfold: from external nature (which include animals); from internal nature (i.e. animality of human – instincts, inner impulses – which is controlled and domesticated[164]; both at a phylogenetic level (human beings as a species) and at an ontogenetic one (individual growth). And domination, in turn, is always instrumental manipulation that goes hand in hand with reason which detects, fixes and objectifies in the concept those aspects of nature on which the instrumental activity operationally intervenes for its own purposes. The way in which this manipulation has materialized has undergone changes over time, to which correspond as many progressive/regressive phases of the process. This process is always a process of thought, of reason – which reaches its apex with modern science and technology – that is accompanied by material processes

however, that the very concept of that thinking, no less than the concrete historical forms, the institutions of society with which it is intertwined, already contains the germ of the regression which is taking place everywhere today. If enlightenment does not assimilate reflection on this regressive moment, it seals its own fate» (Horkheimer and Adorno, *Dialectic of Enlightenment* cit., p. xvi).

[161] *ibid.*, 148.

[162] *ibid.*, p. 25.

[163] «Human beings purchase the increase in their power with estrangement from that over which it is exerted» (*ibid.*, p. 6).

[164] «Throughout European history the idea of the human being has been expressed in contradistinction to the animal. The latter's lack of reason is the proof of human dignity. So insistently and unanimously has this antithesis been recited by all the earliest precursors of bourgeois thought, the ancient Jews, the Stoics, and the Early Fathers, and then through the Middle Ages to modern times, that few other ideas are so fundamental to Western anthropology» (*ibid.*, pp. 203-204).

and certain social organizations (hunting, nomadism, sedentary societies with agriculture and animal husbandry, capitalism). As summarized by the authors: «Civilization replaced the organic adaptation to otherness, mimetic behavior proper, firstly, in the magical phase, with the organized manipulation of mimesis, and finally, in the historical phase, with rational praxis, work»[165]. With rational praxis begins also the social domination of the privileged class over the working class, as an extension of the human domination of external nature[166].

The peak of this process – which is simultaneously and in a circular way a "going back to the start" – is the mid-nineteenth century conjuntural world situation of totalitarianism and late capitalism. In the forced automatism of modern industrial society one finds again the submission to the hostile and alien forces of nature from which magic and myth, first, and enlightenment, then, should have freed humanity. Here is the barbaric regression to which the violent anthropogenesis leads: «Any attempt to break the compulsion of nature by breaking nature only succumbs more deeply to that compulsion»[167].

The only way out is in the evidence of the non-necessity of the necessity of dominion through the remembrance of nature, i.e. when nature is «apprehended as knowledge»[168]:

> But a true praxis capable of overturning the status quo depends on theory's refusal to yield to the oblivion in which society allows thought to ossify [. . .] Enlightenment consummates and abolishes itself when the closest practical objectives reveal themselves to be the most distant goal already attained, and the lands of which "their spials and intelligencers can give no news"

[165] *ibid.*, p. 148.
[166] «But if the nomadic savage, despite his subjection, could still participate in the magic which defined the limits of that world, and could disguise himself as his quarry in order to stalk it, in later periods the intercourse with spirits and the subjection were assigned to different classes of humanity: power to one side, obedience to the other. The recurring, never-changing natural processes were drummed into the subjects, either by other tribes or by their own cliques, as the rhythm of work, to the beat of the club and the rod, which reechoed in every barbaric drum, in each monotonous ritual» (*ibid.*, pp. 15-16).
[167] *ibid.*, p. 9.
[168] «Nature in itself is neither good [. . .] nor noble [. . .]; only when apprehended as knowledge does it become the urge of the living toward peace, the consciousness which, from the beginning, has inspired the unerring resistance to *Fuhrer* and collective. What threatens the prevailing praxis and its inescapable alternatives is not nature, with which that praxis coincides, but the remembrance of nature» (*ibid.*, pp. 211-212).

> – that is, nature misunderstood by masterful science – are remembered as those of origin[169].

What CAS scholars, who are indebted with this vision, fundamentally retain is the estrangement of nature, especially the internal one: «the self-estrangement of our own animality»[170]. For example, in the introduction to the volume *Critical Theory and Animal Liberation* the editor states:

> All the contributors to our volume show that the compulsory forgetting, or repression, of our own animal essence – that is, of the knowledge that we human beings are always already caught up with the drama of being animal (desiring, feeling, experiencing, suffering, laboring, loving, and so on) – prepares the way for the unending catastrophes of modernity [. . .] Negation of the animal other is not a side concern to the "real issues" facing human social life but the pivot around which our civilization itself has formed[171].

The idea of the whole history of civilization as history of domination: a (circular) progress/regress starting from the domination of nature and culminating with capitalism is interpreted seamlessly:

> Of the two modes of life [speciesism and capitalism], speciesism is undoubtedly the more fundamental one. This is so not only because domination and control of other species is the precondition for all capital accumulation but because our species life, our identity as a species, is organized around this dominion. Speciesism, we might say, is the "*Ur*"-modality or most primordial of all modes of human life, of human productive activity [. . .] Simply put, capitalism is the highest form of speciesism, the "ideal," or most fully realized – and therefore most destructive – of the myriad forms that speciesism could conceivably take[172].

[169] *ibid.*, p. 33.
[170] Sanbonmatsu, "Introduction" cit., p. 7.
[171] *ibid.*, p. 8.
[172] Sanbonmatsu, "Capitalism and Speciesism" cit., p. 3. Or again: «Though capitalism did not create speciesism, it removed the last of the cultural and technical barriers to nonhuman animal exploitation which in previous epochs had set at least some limits to the scale and intensity of speciesist exploitation» (*ibid.*, p. 25). In addition, in the lines that immediately precede this excerpt we have a blatant example of economic reductionism: «However, notwithstanding patriarchy, racism, and other structures of power that intersect with and help constitute speciesism, the chief propulsive mechanism of speciesism today remains the capitalist world system» (*ibid.*)

In adopting such a reading, these CAS scholars inherit the problems[173] of Western Marxism as a social theory and its understanding of capitalism. First of all, they adopt a philosophy of history (which is intrinsic to the issue of *Entfremdung* in Marx). Or better said, they adopt an attempt to think of history in terms of an *origin* as presence. In this model of origin, it is assumed that there is an origin, a starting point, a basis, that, at a given time, has established history (or civilization) and that gradually, with the proceeding of history (or civilization) itself, this foundation is concealed and expelled. Therefore, the activity of human becomes – because of its own movement – an activity of concealment that, in an act of imposture, comes to cover and hide what it must be recognized as origin and foundation. At this point there is nothing else to do than looking back and remembering from oblivion – through a movement that pushes through religious, scientific, philosophical forms of sedimentation – what has been concealed and removed, the original foundation that this activity of human necessarily has hidden to itself and restore it once and for all[174].

It is easy to detect this model in *Dialectic of Enlightenment*'s thesis of retrogressive anthropogenesis with its "self-fulfilling prophecy" flavor[175].

Moreover, Adorno and Horkheimer's philosophy of history is «exempted from scientific confirmation»[176], from the confrontation with the particular sciences. The theoretical task of social criticism is, then, assigned solely to philosophy. Thus, Adorno and Horkheimer can draw the course of the process of European civilization on the basis of indirect testimonies of

[173] We can let aside here the problems of these perspectives related to their intrinsic essentialism and their adopting a humanist/anthropocentric social ontology – indeed at the basis of Frankfurt's social theory – to sustain the animal liberation. On this see Craig McFarlane, *Critical Animal Studies Beyond Anthropocentrism and Humanism*, 2011. Paper presented at "Thinking About Animals" conference, Brock University, 31 March-1 April 2011.

[174] See Warren Montag, "'Foucault and the Problematic of Origins': Althusser's Reading of *Folie et deraison*", in *Borderlands*, vol. 4, no. 2 (2005), `http://www.borderlands.net.au/vol4no2_2005/montag_foucault.htm`.

[175] «With the denial of nature in human beings, not only the *telos* of the external mastery of nature but also the *telos* of one's own life becomes confused and opaque. At the moment when human beings cut themselves off from the consciousness of themselves as nature, all the purposes for which they keep themselves alive – social progress, the heightening of material and intellectual forces, indeed, consciousness itself – become void, and the enthronement of the means as the end, which in late capitalism is taking on the character of overt madness, is already detectable in the earliest history of subjectivity» (Horkheimer and Adorno, *Dialectic of Enlightenment* cit., pp. 42-43).

[176] Honneth, *The Critique of Power* cit., p. 59 ff.

the history of ideas: literary and philosophical works (especially Kant and Nietzche's text), Homer's *Odissey*, de Sade's tales[177]. This way, Western Marxism is characterized by: first, «the neglect of problems of politics and state theory»[178], adopting, generally speaking, a repressive and instrumental theory of the state. This reading is reflected, for example, in the following quote by Sanbonmatsu: «The role of the state [...] in promoting and consolidating the capitalist-speciesist system could itself be the subject of an entire book. Under capitalism, the state effectively *serves* to protect the interests of corporations and the wealthy»[179]. Second, «a selective reception of Marx's theory of value, and the predominance of a "silent orthodoxy" concerning the critique of political economy»[180]. The *summa* of these two features can be identified in the adoption of the concept of "state capitalism" as the central element of *Dialectics of Enlightenment*'s analysis of the socio-economic structure of contemporary society and the liberal phase of capitalism. As highlighted by Honneth, this vague category, originally introduced by Frankfurt scholar Friedrich Pollock to account for the National Socialist political-economic order alone:

> asserts a mode of organization of capitalism in which the steering of the entire economic process by the mediating sphere of the competition of individual capitalists is transferred over to the centralized administrative activity of an apparatus of domination. The calculated interests of the major corporations and the planning capacity of the state organs come together in a technical rationality to which all domains of social action are uniformly subordinated. [...] The cycle of civilization comes to a close with the end of liberal capitalism since, with the formation [...] of an administrative elite who exercise control, a piece of human prehistory returns – the arbitrary and violent appropriation of power by social groups[181].

Therefore, the analysis of the peculiarity of capitalist society and its form of domination and socialization, in light of the critique of political

[177] For an attempt of a historical reconstruction of Adorno and Horkheimer's historico-philosophical theory of domination, that trace the link between domestication – neolithic revolution – and the birth of property relations and the state, understood as «tracing back the history of class-societies to the enslavement of nonhuman nature» see Maurizi, *Al di là della natura* cit.
[178] Elbe, "Between Marx, Marxism, and Marxisms" cit.
[179] Sanbonmatsu, "Capitalism and Speciesism" cit., p. 14 ff. [emphasis added]
[180] Elbe, "Between Marx, Marxism, and Marxisms" cit.
[181] Honneth, *The Critique of Power* cit., pp. 72-73.

economy is not even a task, since in the totalizing view of the history of domination: «the commodity exchange is merely the historically developed form of instrumental rationality»[182], which has developed in the originary process of human self-affirmation on nature.

1.3.2 CAS and operaismo-postoperaismo

Other analyses in the field of CAS, e.g. those of Wadiwel[183] and Kowalczyk[184], work with conceptual tools coming from the post-Marxist currents of Italian operaismo and post-operaismo. Operaismo, emerged in the 1960s in Italy and then spread in the 1970s to other countries as part of the so-called New Left, challenges traditional Marxism and its orthodox determinism and economism starting by a rereading of Marx's *opus* from the point of view of the observation included in *Grundrisse*, especially the famous *Fragment on machines*, and *Results of the Immediate Process of Production*. It criticizes classical workers' movement and left political parties for viewing workers as a mere social factor, a passive object to be managed. Operaismo operates a "Copernican Inversion"[185] which poses the working class and class struggle as the motor of capitalist development, replacing the role that was traditionally attributed to objective economic laws. In this view, capitalism adapts itself to the thrusts and shocks produced by the workers' movement and its capability for resistance, modifying its own productive forms (new working practices, new technologies). Only in this way the capital can continue its process of valorization.

> Workers' struggles determine the course of capitalist development; but capitalist development will use those struggles for its own ends if no organized revolutionary process opens up, capable of changing that balance of forces. It is easy to see this in the case of social struggles in which the entire systemic apparatus of domination repositions itself, reforms, democratizes

[182] *ibid.*, p. 38.
[183] Dinesh J. Wadiwel, "Do fish Resist?", in *Cultural Studies Review*, vol. 22, no. 1 (2016), pp. 196-242; Dinesh J. Wadiwel, "Chicken harvesting machine: Animal labor, resistance, and the time of production", in *South Atlantic Quarterly*, vol. 117, no. 3 (2018), pp. 527-549.
[184] Kowalczyk, "Mapping Non-Human Resistance in the Age of Biocapital" cit.
[185] Harry Cleaver, "The Inversion of Class Perspective in Marxian Theory: From Valorisation to Self-Valorisation", in *Open Marxism-vol. 2: Theory and Practice*, ed. by Bonefeld Werner *et al.*, Pluto Press, London 1992, pp. 106-144.

and stabilizes itself anew[186].

Given this inversion, and later post-operaist Antonio Negri's and Micheal Hardt's reinterpretation of the working class as a boundlessness "multitude", it is easy to understand how critical animal studies scholars can gain momentum from such a starting point which, precisely, privileges and highlights the capability of resistance and struggle of the oppressed, their possibility and ability to oppose exploitation, which also allows an extension of the concept of multitude to include animals. However, both operaismo and post-operaismo have been convincingly criticized in their account of capitalist society, thus drawing on their conceptualizations cannot allow to adequately comprehend animal domination within capitalist society. The main shortcomings of these perspectives are about crisis theory, on the one hand, and Marx's value theory and the consequent introduction of the notion of "immaterial labor", on the other one.

To put it very briefly, by emphasizing the role of class conflict as the decisive factor for capitalist crises, (post-)operaismo not only tends to overestimate and idealizes contemporary struggles which very well may be against capital without being against capitalism as such, but also and more importantly, misses the crucial aspect of Marx's theory of crisis, i.e. that the capitalist mode of production have *intrinsic tendencies* toward crisis which are entirely independent of the state of class struggle[187].

Hardt and Negri reject Marx's theory of value drawing on the alleged novelty of "immaterial labor" (Maurizio Lazzarato, "Immaterial Labor", in *Radical thought in Italy: A potential politics*, ed. by Paolo Virno and Michael Hardt, University of Minnesota Press, Minneapolis 1996, pp. 142-157) around which they center their theory of economy and contemporary capitalist society. They argue that immaterial (intellectual, communicative, affective, relational) forms of production have become hegemonic, and,

[186] Mario Tronti, "Our Operaismo", in *New Left Review*, no. 73 (2012), pp. 119-139. For example, according to post-operaist Negri and Hardt the transition to the post-Fordist organization of production based on flexibilities, precariousness, availability is a result of the adapting of capitalism to the active resistance of workers to the Fordist model, through absenteeism, sabotage, cultural experimentation. See Michael Hardt and Antonio Negri, *Empire*, Harvard University Press, Cambridge 2000, pp. 272-276.

[187] See on this Heinrich, *Karl Marx's Capital* cit., pp. 169-178; Frederick H. Pitts, "Creative Industries, Value Theory and Michael Heinrich's New Reading of Marx", in *tripleC: Communication, Capitalism & Critique*, vol. 13, no. 1 (2015), pp. 192-222, pp. 197-199.

since immaterial aspects of labor products can no longer be measured, the labor theory of value becomes outdated. This claim is clearly based on the orthodox "labor" theory of value – equating value-constituting "abstract labor" with temporal, measurable factory labor – which is uncritically assumed only to be refuted. However, this reading shows «an ignorance regarding concepts like value-form or fetishism»[188]. Suffice it to say here that «Marx's concept of "abstract labor" is not at all identical with a particular type of labor expenditure, but rather a category of social mediation: it aims at the specifically social character of privately expended, commodity producing labor – regardless of whether this commodity is a steel tube or care giving labor in a nursing home, which is run in a capitalist way»[189].

Retaining CAS' key features discussed so far, namely intersectionality and sociological orientation to the analysis of contemporary capitalism, while aiming at avoiding their respective criticisms (intersectionality's lack of a consistent social and power theory; economic reductionism and/or mistaken account of the social and capitalism), the next section elaborates a theoretical framework (or a social macro-logic) of CSC for a materialistic approach to socio-political analysis in which species oppression can be addressed in proper and comprehensive ways. This would be an important result if we wish to orientate ourselves in the contemporary world, seeking to understand its fundamental processes, having in mind an ethico-political reconsideration of our relations with nonhuman animals. The macro-logic that will be proposed is articulated into three main concepts: social form, in a Marxian sense, *dispositifs*, and politics[190].

[188] Michael Heinrich, "Invaders from Marx: On the Uses of Marxian Theory, and the Difficulties of a Contemporary Reading", in *Left Curve*, no. 31 (2007). Retrieved from http://www.oekonomiekritik.de/205Invaders.htm.
[189] *ibid.* See also Heinrich, *Karl Marx's Capital* cit., p. 44; Frederick H. Pitts, *Critiquing Capitalism Today: New Ways to Read Marx*, Palgrave Macmillan, London 2017, pp. 191-218.
[190] This perspective draws on and expands the insights presented in Francesco Aloe and Chiara Stefanoni, "Verso una logica dei complessi sociali capitalistici: forme, dispositivi, politica", in *Liberazioni. Rivista di critica antispecista*, no. 34 (2018), pp. 38-50.

2. MACRO-LOGIC OF CAPITALIST SOCIAL COMPLEXES

2.1 DRAWING ON THE *NEUE MARX-LEKTÜRE*

Although Marx speaks in terms of "commodity-*form*", and not of commodity alone, of "money-*form*" and not of money, "value-*form*" and not of value, of "capital-*form*" and not of capital, such conceptual choice has received little attention in Marxist tradition, which took for granted Engel's historicist and empiricist interpretation. It took a hundred years from the publication of the first volume of *Capital* to rediscover Marx's notion of social form and give back to it its proper and deep meaning[1].

This account has been developed by the so-called "new reading of Marx" or "New Marx Reading" (*"Neue Marx-Lektüre"*)[2], a cross-school theoretical current which has been originally introduced and developed mainly in (West) Germany from the mid-1960s onward by marginal Frankfurt scholars (e.g. Hans-Georg Backhaus, Alfred Schmidt and Helmut Reichelt, the three of them pupils of Adorno). Backhaus' pioneering article *On the Dialectics of the Value-Form*[3], written in 1969 could be considered the founding text of the new reading of Marx. Another cornerstone is 1970 Reichelt's *Zur logischen Struktur des Kapitalbegriffs bei Karl Marx*[4]. The other root of New

[1] An earlier version of this section appeared as Chiara Stefanoni, "The "New Marx Reading": An Overview", in *La memoria del cielo*, ed. by Enrico Giannetto, MAAT Studies, no. 4, A&G Cuecm, Catania 2019, pp. 155-170.

[2] See Ingo Elbe, *Marx im Westen. Die neue Marx-Lektüre in der Bundesrepublik seit 1965*, Akademie, Berlin 2010 and, for an introductory overview in English, Elbe, "Between Marx, Marxism, and Marxisms" cit.

[3] Hans-Georg Backhaus, "On the Dialectics of the Value-Form", trans. by Micheal Eldred and Mike Roth, in *Thesis Eleven*, vol. 1, no. 1 (1980), pp. 99-120.

[4] Helmut Reichelt, *Zur logischen Struktur des Kapitalbegriffs bei Karl Marx*, Europäische

Marx Reading lies in the context of the German State-Derivation debate (*Staatableitung*)[5]. The debate, which involved authors such as Bernard Blanke, Ulrich Jürgens, Hans Kastendiek, Joachim Hirsch, Wolfgang Müller, Christel Neusüss, Heide Gerstenberger, emerged in response to practical political problems related to key events in West Germany in the late 1960s for which previous Marxist analyses were unprepared. First, the emphasis on state intervention and its role in the successful economic recovery in 1967-68, after the recession of the previous two years. Second, the fact that the Social Democrats (SPD) had become a major partner in a socio-liberal government, with the election of 1969. Third, the failure of the German student movement in establishing real contact with the working-class movement. All these three developments were asking the same question: which are the limits and possibility of state intervention?[6].

Nowadays, the leading voice of the current is widely acknowledged to be the mathematician and Marx scholar Micheal Heinrich, whose English translated introduction to *Capital*[7], among other writings, has reached a worldwide audience and is considered one of the most authoritative accounts on Marx. In addition to the ones involved in the State-Derivation debate, other authors and collective projects representatives of the New Marx Reading are: Helmut Brentel, Dieter Wolf, Heinz D. Kittsteiner, Projekt Klassenanalyse, PolyluxMarx, Sonja Buckel, Moishe Postone[8] just to name a few.

Actually, the term "New Marx Reading" was coined in 1997 by Backhaus himself[9] and retroactively applied, as a common label, to the heterogeneous perspectives of (West) German Marxian thoughts that emerged, as said, in the mid-1960s. In West Germany – as well as in France, in Italy and beyond – these were the years of the student movement of May '69, of the first jolts to the belief of endless postwar progress, of the Vietnam war and its effects on breaking U.S. consensus... A time where the dogmas and the

Verlagsansts, 1970.

[5] The main contributions to the debate are collected in the anthology John Holloway and Sol Picciotto (eds.), *State and Capital. A Marxist Debate*, Edward Arnold, London 1978.

[6] *ibid.*, p. 15.

[7] Heinrich, *Karl Marx's Capital* cit.

[8] Postone is counted by Heinrich as a full-fledged participant in the New Marx Reading *ibid.*, p. 229.

[9] However, Elbe, *Marx im Westen* cit., p. 31, contends this origin of the term, backdating it in 1973.

worldview of traditional Marxism, with all its ideological shortcomings, – embodied in authoritarian Soviet "Socialism" – were strongly questioned as an adequate understanding of Marx's thought. It was in just those years that the so-called "New Left" or "critical turn" in Marxism arose, with the emergence of the structuralist and post-structuralist currents in France and operaismo and postoperaismo in Italy. Despite the differences of the various voices that animated the debates grouped under the heading of new Marx reading, the shared aim was to overcome the so-called dialectical and historical materialism of Marxism-Leninism, the core theoretical framework of traditional Marxism.

It is also noteworthy that, despite its radical emancipatory statements and unlike operaismo, the new Marx reading did not cross the thresholds of academia, except to a small extent. One crucial moment that shaped this new reading of Marx was the 1967 colloquium *100 Jahre 'Kapital'*. In its context the basic questions and research's objectives for a new reinterpretation of Marx's thought from the methodological perspective of social theory began to be defined: the refuse of any Engelsian and humanistic flavor as a minimum requirement, the question as to the original object and method of the critique of political economy (with an emphasis on Marx-Hegel relation); the link between the three volumes of *Capital*; the stress upon the importance of the *Grundrisse*.

The first, actually incomplete, edition of the *Grundrisse* – the "rough draft" to *Capital* written by Marx between 1857 and 1858 – is due to the Moscow's Marx-Engels Institute in 1939-1941 under the full title *Grundrisse der Kritik der Politischen Ökonomie (Rohentwurf)*. Not surprisingly, this edition almost had no circulation outside the Soviet Union. Also 1953 complete (all seven manuscripts plus miscellaneous related material) Dietz Verlag Berlin edition did not reach a wider audience; it is only in the 1960s, first thanks to 1962 Alfred Schmidt's *The Concept of Nature in Marx*[10] and then thanks to the publication of the substantial commentary[11] on *Grundrisse* by Roman Rosdolsky in 1968 that the reception of *Grundrisse* spread widely in West Germany. As Rosdolsky had stated, then followed by all those

[10] Alfred Schmidt, *The Concept of Nature in Marx*, trans. by Ben Fawkes, New Left Books, London 1971.
[11] Roman Rosdolsky, *Zur Entstehungsgeschichte des Marxschen 'Kapital'*, Europäische Verlagsanstalt, Frankfurt am Main/Wien 1968.

who took part in the debates, the *Grundrisse* was the book that could fully shed light on the question of the Marxian critical-dialectic method. Others Marx's manuscripts available to Germans which have been key texts for the developing of this new reading of Marx are the first edition of *Capital's first volume* and its appendix, or *Anhang*[12], the *Urtext*[13] and the *Contribution to the Critique of Political Economy* and the *Results of the Immediate Process of Production*[14].

Challenging the equation between Engel's commentaries and Marx's thought – the very basic assumption of the Marxist paradigm of the Second and Third Internationals – especially with regard to Engelsian historicist misinterpretation of the first three chapters of *Capital* and, consequently, of value theory, Backhaus (and his inheritors) have set a new methodological program. This program entails the critical-reconstructive reading of Marx's system of thought in order to evacuate those misleading interpretations and ultimately reconstruct the real Marx's method of presentation to finally understand the specificity of the critique of political economy.

Following Elbe[15], it is possible to distinguish three levels of the reconstructive efforts by applying the "exoteric/esoteric" distinction[16] to the corpus of Marx-Engels' work. First, there is the identification and setting aside of the Engelsian component as merely "exoteric", as done, for instance, by Backhaus in his *Materialien zur Rekonstruktion der Marxschen Werttheorie*, parts 1 and 2[17]. Second, the identification and removal of Marx's meta-theoretical self-understanding, the *intentio auctoris*, as an "exoteric" inadequate self-reflection which represents an obstacle to the understanding of the real procedure of analysis of capitalism, the true "esoteric" content. This had been expressed for the first time – and from a different perspec-

[12] Karl Marx, *Capital. A Critique of Political Economy. Vol I*, trans. by Ben Fowkes, Penguin Classics, London 1990, pp. 943-1084.
[13] Karl Marx, *The Original Text of the Second and the Beginning of the Third Chapter of "A Contribution to the Critique of Political Economy" (the Urtext)*, in Marx *et al.*, *MECW* cit., pp. 430-507.
[14] Karl Marx, *Results of the Direct Production Process*, in Marx *et al.*, *MECW* cit., pp. 355-471. For this account see Elbe, "Between Marx, Marxism, and Marxisms" cit.
[15] *ibid.*
[16] The distinction between the exoteric and esoteric aspects of Marx's theory goes back to Stefan Stefan Breuer, *Die Krise der Revolutionstheorie: negative Vergesellschaftung u. Arbeitsmetaphysik bei Herbert Marcuse*, Syndikat, Frankfurt am Main 1977.
[17] Collected in Hans-Georg Backhaus, *Dialektik der Wertform. Untersuchungen zur Marxschen Ökonomiekritik*, Ça ira, Freiburg 1997.

tive – by Louis Althusser's idea of a reconstruction of *Capital* through a "symptomatic" reading[18] but also by Alfred Schmidt and Backhaus. Third, the application of the "exoteric/esoteric" distinction to Marx's work in the very terms Marx himself employs it in his analysis of the *œuvres* of classical political economy. Here, the "exoteric" argumentation refers to an inquiry that adheres – by merely describing it or, at the most, by systematizing it – to the dimension of everyday consciousness of social agents (including the authors themselves) and their immediate perceptions and representations. On the contrary, the "esoteric" level refers to the comprehension of the formation of those forms of thought within the context of capitalist social intercourse. This deeper stage of the critical-reconstructive reading, pursued among others by Backhaus in *Materialien*'s third and fourth part and by Heinrich in his *Die Wissenschaft vom Wert*[19], duplicates the application of the "esoteric/exoteric" distinction identifying elements of the one type and the other both at the level of Marx's meta-discourse and at the level of his real analysis, i.e. the correct elaboration of the theory. This is to say, on one the hand, that Marx's self-understanding meta-discourse is not entirely to be rejected as "exoteric", since it contains some intact "esoteric" insights, and, on the other hand, that there are "exoteric" contents – probably due to political and popular concerns – and conceptual ambiguities even in the critique of political economy, previously labeled as "esoteric". According to Elbe:

> In place of the legend of a linear progression of knowledge on Marx's part, there appeared the recognition of a complex coexistence and interpenetration of progress and regression in the method of presentation and the state of research of Marx's critique of economy[20].

It is important here to further distinguish between two different conceptions of reconstruction. To maintain the idea of the existence of an esoteric content, even at this last deeper stage of interpretation, means to maintain the belief in the existence of a coherent *hidden kernel*, a covered inner logic

[18] See Louis Althusser, "From *Capital* to Marx's Philosophy", in Althusser *et al.*, *Reading Capital* cit., pp. 11-70.
[19] Michael Heinrich, *Die Wissenschaft vom Wert. Die Marxsche Kritik der politischen Ökonomie zwischen wissenschaftlicher Revolution und klassischer Tradition*, Westfälisches Dampfboot, Münster 1999.
[20] Elbe, "Between Marx, Marxism, and Marxisms" cit.

of Marx's theory. Backhaus and Reichelt, to name the most distinguished representatives of this conception, believed that this inner, coherent kernel had remained in a certain purity especially in the *Grundrisse*[21] but also in the other drafts of *Capital*. Thus, the reconstruction means to detect and keep what is lost and to complement the later texts in the light of the earlier ones, bringing to the fore the existing, esoteric core they hide. As Heinrich elucidates[22], the very possibility of this project of reconstruction and the belief in its fulfillment were contingent upon the group of texts collected in the critical edition of the complete works of Marx and Engels, the MEGA (*Marx-Engels-Gesamtausgabe*[23]) of the 1970s, and the way they were divided. Section II of the MEGA labels the *Grundrisse* 1857/58, the *Economic Manuscript of 1861-63*, and the *Economic Manuscript of 1863-65* as the preparatory works, the three drafts of *Capital*. Here it is presupposed a

[21] Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, trans. by Martin Nicolaus, Penguin Classics, London 2005.

[22] See Michael Heinrich, "Reconstruction or Deconstruction? Methodological Controversies about Value and Capital, and New Insights from the Critical Edition", in *Re-Reading Marx. New Perspectives after the Critical Edition*, ed. by Riccardo Bellofiore and Roberto Fineschi, Palgrave Macmillan, London 2009, pp. 71-98.

[23] The first project of a MEGA – the so-called first MEGA – was outlined in 1921 by the philologist and leftist intellectual David B. Rjazanov, at that time director of Marx-Engels Institute, just founded in Moscow, with the support of German Social Democrats Party, SPD (owner of the vast majority of Marx's original manuscripts). The whole plan comprised three sections: the first devoted to the *œuvres* except *Capital*, the second to *Capital* and the third to the correspondence. In 1927 the first of the forty-two volumes expected for the MEGA appeared in Frankfurt. Then, between 1929 and 1932, other eight volumes were published by Berlin Marx-Engels-Verlag. The project, however, was left incomplete due to the seizure of power by Hitler and the escalating Stalinian terror. After the Second World War, the idea of a new edition was taken into consideration with the explicit refusal to continue the Rjazanov's one since it was adherent to outdated philological criteria. However, only after Stalin's death and especially with Kruscev, it could be possible to undertake a second attempt, assigned to the Institutes of Marxism-Leninism of the Social Unity Party (SED) in Berlin and the Communist Party of the Soviet Union (CPSU) in Moscow. Following new editorial guidelines and innovative concepts (total reproduction of the correspondence; complete reproduction of every layer of work: sketches, drafts, manuscripts; original language with original punctuation and orthography; appendixes with additional historical-philosophical-political clarifications) in 1972 appeared a first sample volume, followed by the first volume of the new, second MEGA in 1975. After the fall of "real socialism", in the 1990s the publishing of MEGA was transferred to the Internationale Marx-Engels-Stiftung (IMES) in Amsterdam. So far (October 2019) sixty-five of the expected 114 volumes of the comprehensive plan of the MEGA have been published. For a contribution in English to the history of MEGA edition and the publication in German of Marx's and Engels's works see the preface to Riccardo Bellofiore and Nicola Taylor (eds.), *The Constitution of Capital: Essays on Volume 1 of Marx's Capital*, Palgrave Macmillan, London 2004. In Italian: see Roberto Fineschi, *Un nuovo Marx: filologia e interpretazione dopo la nuova edizione storico-critica (MEGA²)*, Carocci, Roma 2008.

linear development from 1857 onward aimed, through the steps of each draft, at *Capital* as its final and complete result: volume I followed by Engels' edition of volumes II and III. In doing this, it is also taken for granted that a clear distinction between drafts and final work exists. But «this labelling is not a pure *description*, it implies a certain *judgement*, and a judgment which can be questioned»[24].

The current material of the MEGA, much richer than the 1970s one – when the project of a critical edition of the complete work of Marx and Engels had just been (re)undertaken – seriously challenges the project of reconstruction as such. On the one hand, the idea of a clear distinction between drafts and final work falls, «we have only differently developed drafts of a shifting unfinished and incomplete projects. And on the other hand, we find several ambivalences even in basic notions which make different lines of interpretation and reasoning possible»[25].

These ambivalences are not there by accident, rather they are caused by a fundamental problem: the complex coexistence of two discourses in Marx's *Capital*. On the one hand, there is the «scientific attempt» to «revolutionize a science»[26], namely the science of political economy – eschewing its humanism, individualism, ahistoricism and empiricism – in order to favor to provide a social revolution and, on the other hand, still, the presence of that science itself. As Heinrich puts it clearly:

[24] Heinrich, "Reconstruction or Deconstruction?" cit., p. 78. For example, Heinrich himself challenges this standardized view, see *ibid.*, pp. 78-90. Drawing on a close philological reading of Marx's economic manuscripts 1850-81, he argues for the existence of two different projects: a *Critique of Political Economy* in six books – capital, landed property, wage-labor, the State, foreign trade, the world market – and *Capital* in four books – three theoretical ones and a fourth on the history of economic theory –. According to Heinrich, the attempts to realize the first project involved the texts (including drafts and published works) from *Einleitung*, written in summer 1857, to *Economic Manuscript of 1861-63*. The second group of texts composed for the second project comprises the works from *Economic Manuscript of 1863-65* to 1881 *Notes on Wagner* (see the tables in *ibid.*, pp. 86-87). Besides important changes regarding value theory, accumulation, circulation, and crisis, the two projects can be distinguished relying on the different structural principle they adopt, namely the distinction between "capital in general" and "competition of many capitals" for the *Critique of Political Economy* and the relation of "individual capital" and "total social capital" for *Capital*.

[25] Michael Heinrich, *Ambivalences of Marx's Critique of Political Economy as Obstacles for the Analysis of Contemporary Capitalism*, 2004, `http://www.oekonomiekritik.de/310Ambivalences.htm`. 2nd Historical Materialism Conference, London, 10 October 2004, revised paper.

[26] See Karl Marx, *Marx to Kugelmann, December 28 1862*, in Marx *et al.*, *MECW* cit., pp. 435-437, p. 436.

> This scientific revolution, this break with the theoretical field of political economy, was not complete. At some points of his presentation, Marx stuck to the field he broke with at the same moment. In the same text we can observe a break with this field and the continuing presence of some elements of this field. These two sides are not clearly separated[27].

Consequently, the idea is not to reach the final truth about Marx's critique, reconstructing its inner, coherent core, which, ultimately, does not exist. Rather it is more a «*constructive* task [. . .] an always unfinished, open and at every level questionable process»[28]. The aim is to continue working on Marx's revolution, removing the incrustations which keep it tied to the traditional categories of economy and which can be obstacles to the comprehension of the contemporary capitalist development with the help of Marxian categories. Moreover, this openness means that also the categories used for the analysis themselves are questionable.

The first (re)constructive effort, started by Backhaus and Reichelt, was focused on value theory and it consisted of a move away from a substantialist-naturalist theory of value in the direction of a pure monetary theory of value. The reflection upon value, indeed, has been prominent in the New Marx Reading tradition. Some critics have pointed out[29] that this emphasis on value happened at the expense of the analysis of the constitution of capitalist totality and that the reconstruction of *Capital* did not reach the categories of capitalist production, nor the general law of accumulation. As a result, the charge is of being an «apolitical and [. . .] neoscholastic reading of Marx»[30]. If this critique might hold in the case of Backhaus and Reichelt's first works, it does not with regard to more recent and complete

[27] Heinrich, *Ambivalences of Marx's Critique of Political Economy as Obstacles for the Analysis of Contemporary Capitalism* cit. Heinrich elucidates this thesis with the analysis of three issues in which the ambivalence is patent: value, money-commodity, crises. First, in dealing with value two approaches stand side by side: a "substantialist-naturalist theory of value" and a "monetary theory of value". Second, Marx presupposes the necessity of a money-commodity as the bearer of the money *form*. Third, the interaction between a monetary theory of capital and crises and a non-monetary one.
[28] Heinrich, "Reconstruction or Deconstruction?" cit., p. 96.
[29] See Riccardo Bellofiore and Tommaso Redolfi Riva, "The Neue Marx-Lektüre. Putting the Critique of Political Economy Back into the Critique of Society", in *Radical Philosophy*, no. 189 (2015), pp. 24-36 and Werner Bonefeld, *Critical Theory and the Critique of Political Economy: On Subversion and Negative Reason*, Bloomsbury, London 2014.
[30] Mikkel Bolt Rasmussen and Dominique Routhier, "Critical Theory as Radical Crisis Theory: Kurz, Krisis, and Exit! on Value Theory, the Crisis, and the Breakdown of Capitalism", in *Rethinking Marxism*, vol. 31, no. 2 (2019), pp. 173-193, p. 179.

analysis within the framework of the New Marx Reading. In addition, a historical overview of the actual multifarious theoretical sources and influences merged in the New Marx Reading is helpful to put aside this position.

As previously said, one essential push to the development of this current was the State-Derivation debate, centered on the problem of the political dimension and social domination in capitalist society. The theoretical core of the whole quarrel was the attempt to anchor, from both a logical (meaning conceptual, theoretical) and a historical point of view, the foundation of the separation between the economic and the political that occur in capitalist societies in the analysis of capitalist production process. The aim, in other words, was to derive the state (or the separation between the economic and the political) from the category of capital. The argumentative target were those theorists, like Habermas, who detach the study of politics from the analysis of capitalist production, without any awareness of that separation itself.

It was precisely in this context that the masterly 1923 essay *The General Theory of Law and Marxism*[31] by the Soviet legal scholar Evgenij B. Pašukanis – executed during the Great Purge in 1937 – was fully appreciated, making its author be explicitly considered a predecessor of the new reading of Marx. Together with Pašukanis another Soviet scholar is regarded as a predecessor of the New Marx Reading's tradition: the economist Isaak I. Rubin. His major work *Essays on Marx's Theory of Value*[32], which appeared in 1923 in the USSR and popularized only in the 1970s when it was translated into English and other languages, became a foundation stone of the current. Rubin, like Pašukanis, was executed during the purges of 1937.

In addition, the complex and close interconnection between post-structuralist scholars, such as Althusser himself, Jacques Rancière, and the – more or less contemporaneous – West German discussions cannot be just ignored, rather they need to be explored more profoundly in order to have the whole picture of New Marx Reading[33].

[31] Evgeny B. Pašukanis, *The General Theory of Law and Marxism*, trans. by Barbara Einhorn, Transaction Publishers, New Brunswick 2002.
[32] Isaak I. Rubin, *Essays on Marx's Theory of Value*, trans. by Miloš Samardžija and Fredy Perlman, Black & Red Books, Detroit 1972.
[33] Regarding value theory and fetishism, Althusser considered them nothing but a version of Feuerbach's theory of alienation, thus in the 1970s he completely dismissed them

As highlighted by Elbe[34], one of the first attempts to combine the West German debates and post-structuralism was made in 1976 by Joachim Hirsch in the field of state theory[35]. Hirsch tries to integrate the formal-analytical method of the State-Derivation debate with Althusser's Ideological State Apparatus theory and, above all, with the Gramscian inspired relational state theory developed by (former) Althusser's pupil Nicos Poulantzas. The meaningful reason for this experiment lies in that form-analysis cannot go beyond the determination of the basic class character of the bourgeois state and leaves most questions open for a concrete political analysis. Hence, Hirsch aims to find a bridge between conceptual-logical analysis and historical investigation. Despite necessary mutual corrections or expansions, attempts such as Hirsch's one show that the two major efforts for a renewal of Marxism as a political theory – the 1960s one and

as residual idealism. In 1969, in an introduction to Volume One of *Capital*, he wrote that readers should «put THE WHOLE OF PART ONE ASIDE FOR THE TIME BEING and BEGIN YOUR READING WITH PART TWO: 'The Transformation of Money into Capital'» (Louis Althusser, *Lenin and Philosophy and Other Essays*, trans. by Ben Brewster, Monthly Review Press, New York 1971, p. 81). However, in 1965 collective volume *Reading Capital*, at the moment of "High Althusserianism", not only Althusser himself (see Althusser, "From *Capital* to Marx's Philosophy" cit.) flirted with the conceptual pair of visibility/concealment – which is crucial for a theory of fetishism –, but above all Jacques Rancière consistently developed a theory of fetishism and value-form based on criticizing such readings in terms of idealist anthropological critique of alienation (see Rancière, "The Concept of Critique and the Critique of Political Economy" cit.). From today's standpoint, Rancière's text, so deeply focused on the notions of social forms, subjectification, and objectification as it is, constitutes an extremely important contribution to the debate on the value-form, showing conceptual affinities with the New Marx Reading. See Elbe, *Marx im Westen* cit., pp. 58-62 and Panagiotis Sotiris, "Althusserianism and Value-form Theory: Rancière, Althusser and the Question of Fetishism", in *Crisis and Critique*, vol. 2, no. 2 (2015), pp. 167-193. Nevertheless, due to Rancière's (and Althusser's) later rejection of the notion of fetishism, post-1968 disappointment, this affinity has gone unnoticed. On the question of the relation between value-form theory and Althusserianism see also: Panagiotis Sotiris and Dimitris Papafotiou, *Althusser and Value-Form Theory: a Missed Encounter?*, 2016, `https://www.academia.edu/29894551/Althusser_and_value-form_theory_a_missed_encounter`. Paper presented at the 13th Historical Materialism Conference, London, 10-13 November 2016 and John Milios, "Rethinking Marx's Value-Form Analysis from an Althusserian Perspective", in *Rethinking Marxism*, vol. 21, no. 2 (2009), pp. 260-274.

[34] Elbe, *Marx im Westen* cit., pp. 401-404.

[35] See Joachim Hirsch, "Bemerkungen zum theoretischen Ansatz einer Analyse des bürgerlichen Staates", in *Gesellschaft. Beiträge zur Marxschen Theorie*, vol. 8, no. 9 (1976), pp. 99-149; Joachim Hirsch, *Materialistische Staatstheorie. Transformationsprozesse des kapitalistischen Staatensystems*, VSA, Hamburg 2005 and Joachim Hirsch and John Kannankulam, "The Spaces of Capital: the Political Form of Capitalism and the Internationalization of the State", in *Antipode*, vol. 43, no. 1 (2011), pp. 12-37

the 1970s one – have by no means mutually exclusive. This fact is further proved by many other tries in this vein (referring mainly to Poulantzas[36] but also to Foucault) undertaken more recently, such as the so-called "historical materialist policy analysis" (HMPA) and the so-called "strategic-relational approach"[37]. A key source of such readings centered on the state and politics, on relations of forces, is *The Eighteenth Brumaire of Louis Bonaparte*[38], written by Marx in 1852 and devoted to a historiographical description of the background to Louis Bonaparte *coup d'état* in 1851. Also important in this perspective is its "prequel", so to say, *The Class Struggles in France, 1848 to 1850*[39] of 1850. Why is this so? *The Eighteenth Brumaire* presents a periodization of political developments analyzed – following Jessop[40] – in terms of:

1. the political stage and its actors, i.e. the superficial but causally effective level of discourses and symbolism through which different political forces express their aspirations and try to persuade their audience;
2. "the social content of politics", i.e. the class struggle content behind the scenes of this stage. Marx's analysis of this content (class compositions, class interests) is related to economic interests in specific conjunctures and/or periods and the consequent various strategic and tactical possibilities rather than to abstract position in the process of production;
3. the changes in the institutional architecture of the state and their consequent structural influence on the political balance of forces;
4. the interconnected movements of the local, national and international economy over different time scales insofar as they shape the political positions in given conjunctures.

Hence, considering these debates brings out the second and third threads – after the criticism of the premonetary theories of value – that shape the

[36] See Alexander Gallas *et al.* (eds.), *Reading Poulantzas*, Merlin Press, Talgarth 2011.
[37] A more detailed account of HMPA approach is developed below, in the section "*Dispositif* and Politics".
[38] Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte*, in Marx *et al.*, *MECW* cit., pp. 99-197.
[39] Karl Marx, *The Class Struggles in France, 1848 to 1850*, in Marx *et al.*, *MECW* cit., pp. 45-145.
[40] Bob Jessop, *State Power: a Strategic-Relational Approach*, Polity Press, Cambridge 2008, pp. 85-98.

(re)constructive efforts of the Neue Marx-Lektüre: first, the rejection of any manipulative-instrumental conception of the state and, second, the abandonment of interpretations of Marx's theory «based on labor-ontological revolutionary theory (or even upon revolutionary theory as such)»[41]. In the background of all of this lies a precise understanding of what Marx is genuinely portraying in *Capital*: nor is English capitalism contemporary to him, neither is competitive nineteenth-century capitalism, neither is any other empirically existing capitalism. Rather, the object of study Marx is concerned with is, to use his words: «the internal organization of the capitalist mode of production, its ideal average, as it were»[42], that is, the fundamental categories/social forms which characterize every particular capitalism. Otherwise stated, the purpose of Marx's investigation is to outline those essential aspects that make capitalism what it is, differentiating it from non-capitalist modes of production, so that we may speak of "capitalism" as such. At least in his intents. Indeed, at some points, Marx got it wrong and has mistaken contingent elements proper to the particular nineteenth-century capitalist configuration which he lived in for central mechanisms of capitalist dynamics in their ideal average. One clear example of this is Marx's thesis on the necessary existence of a money-commodity, which the collapse of Bretton-Woods currency system irrefutably has proved wrong[43].

At the same time, it has happened that some intrinsic features of capitalism analyzed by Marx first have developed to full effect only in the twentieth century. This is the case, for example, of the "production of relative surplus value". Thus, «in some respects, one could say that Capital has more applicability to the 20th and 21st centuries than to the 19th»[44]. This can happen because to describe capitalism in its "ideal average" means to argue on an extremely high level of abstraction. And yet this capitalism in its ideal average is never given in space and time; what is given is always and only its historical manifestations, embedded in concrete social and political processes, in which capitalist and non-capitalist elements coexist.

[41] Elbe, "Between Marx, Marxism, and Marxisms" cit.
[42] Karl Marx, *Capital. A Critique of Political Economy. Vol III*, trans. by David Fernbach, Penguin Classics, London 1991, p. 970.
[43] See Heinrich, *Karl Marx's Capital* cit., pp. 69-70, 161-162.
[44] Heinrich, "Invaders from Marx" cit., p. 83, p. 5.

However, if one wishes to analyze this coexistence, that is, to undertake any research into a particular manifestation of capitalism or its history, rather than merely describe it, grasping the capitalist categories/social form as such is absolutely necessary. And the method to grasp them is the "analysis of forms", the social *form-analysis*, the form-genetic method, which is, according to the Neue Marx-Lektüre, the core of Marx's ground-breaking revolution[45]. The fundamental Marxian question is on the logical process of *form-determination* which he applied to the genesis of the categories of political economy in order to bring into light the social relations concealed/organized in those forms:

> Political economy has indeed analysed value and its magnitude, however incompletely, and has uncovered the content concealed within these forms. But it has never once asked *the question why this content has assumed that particular form*, that is to say, why labour is expressed in value[46].

The same question is raised by Pašukanis in relation to the state and the law[47]:

> His definition [Stuchka's one] uncovers the class content concealed within legal forms, but does not explain why this content assumes that particular form. For bourgeois philosophy, which regards the legal relation as the eternal, natural form of every human relation, this question never even arises[48].

Following these questions, then, the new reading of Marx rereads Marx's critique of political economy in terms of social *form-analysis*, i.e. as critical

[45] Marxist orthodoxy, beginning with Engels' commentary on Marx's *Contribution to the Critique of Political Economy* (1859) or the supplement to Volume III of *Capital* (1894), followed by Karl Kautsky, Rudolf Hilferding, Lenin and so on, gives a historicist interpretation of the form-genetic method. Marx's analysis is understood to be mere empiricism and historicism and *Capital* to be a historiographical work. Thus, just to make an example of this reading, according to Engels, the first three chapters of *Capital* describe a historical economic epoch which he calls "simple production of commodities" and dates from 6000 BC to the fifteenth century.

[46] Marx, *Capital I* cit., pp. 173-174. [emphasis added]

[47] When Marx undertook his wide project of a critique of political economy at the end of the 1850s, he meant to write also a volume wholly dedicated to the state. In the preface to *Contribution to the Critique of Political Economy* of 1859, indeed Marx states: «I examine the system of bourgeois economy in the following order: *capital, landed property, wage-labour; the State, foreign trade, world market*» (Marx, *A Contribution to the Critique of Political Economy* cit., p. 261.). However, the book on the state was never written and in *Capital* one can find only some scattered references to the topic.

[48] Pašukanis, *The General Theory of Law and Marxism* cit., p. 84.

analysis of *specific* social forms of capitalist social complexes, conceiving as such not only economic forms like capital, value, money but also the legal-political form, namely the law and the state[49]. In this perspective, the critique of political economy uniquely qualifies as critical theory of the *constitution* of social complexity in the proper conditions of commodities capitalist production. This means considering these forms as rising from «the connection between the material process of production and reproduction of the life of socialized people and the relations between these people who constitute themselves in this process of material reproduction»[50].

In bringing to the fore the method of social form analysis, then, the new reading of Marx focuses more on qualitative and sociological aspects of the critique of political economy, against conventional Marxism which sees it as an alternative economic doctrine or as a theory of the distribution and redistribution of social wealth. In this respect, the Neue Marx-Lektüre shows its debt with Frankfurt School's critical theory of society. On the one hand, the new reading of Marx, starting from Backhaus and Reichelt, explicitly distances itself[51] from the culture-critical orientation of Frankfurt's reading of Marx that ends up into a critique of instrumental reason as a philosophy of history and into anthropological pessimism. It also rejects and shows the shortcomings undertaken by Frankfurt scholars in their attempts – actually vague and indeterminate, or wholly absent – to elaborate a critique of political economy, remaining instead within the horizon of a critical political economy[52]. This is to say that they assume from the very

[49] On legal-political form see Aloe and Stefanoni, "Verso una logica dei complessi sociali capitalistici" cit., especially pp. 39-43.

[50] Bernhard Blanke *et al.*, "On the Current Marxist Discussion on the Analysis of Form and Function of the Bourgeois State", in Holloway *et al.* (eds.), *State and Capital* cit., pp. 108-147, p. 118.

[51] «The fact that the concept of society and the concept of ideology of the Frankfurt School become comprehensible only adopting as a starting point the Marxian theory of value, and yet that this dimension of value theory has been completely obscured both in the German controversy on positivism and in the commented exposition of this controversy, shows how Adorno and Horkheimer themselves did not carry out sufficient methodological reflection on the foundation of critical theory in terms of value theory» (My translation from the Italian: Hans Georg Backhaus, *Ricerche sulla critica marxiana dell'economia: materiali per la ricostruzione della teoria del valore*, ed. by Riccardo Bellofiore and Tommaso Redolfi Riva, Mimesis, Milano-Udine 2016, p. 127. Original passage in German: Hans-Georg Backhaus, "Materialien zur Rekonstruktion der Marxschen Werttheorie 3", in *Gesellschaft. Beiträge zur Marxschen Theorie 11*, ed. by Hans-Georg Backhaus, Suhrkamp, Frankfurt am Main 1978, pp. 72-73.

[52] «Critical political economy adopts the conceptual horizon of political economy; the

beginning the categories of political economy which instead have to be explained. For example, Adorno assumes that the fetish character of the commodities is a result of the monetary exchange without asking why the process of socialization in capitalist societies assumes this form, falling into a premonetary theory of value which Marx irrefutably proved wrong.

However, at the same time, some key reflections of Frankfurt scholars are central to the development of the New Marx Reading, beginning with the influence on Backhaus's critical reconstruction of Marx's theory and Reichelt's theory of validity, as both two patently recognize and emphasize[53].

First, there is Adorno's focus on socialization [*Vergesellschaftung*] as the basis of society and the consequent interpretation of Marx's critique of political economy as the analysis of the specific form of socialization in capitalist society[54], the idea of an «anamnesis of the genesis»[55] of autonomized social forms. Second, and related to this, Adorno's conceptualization of the critique of fetishism as «the theoretical tool to understanding the social nature of capitalist social relations»[56], together with the theory of

critique of political economy opens onto a very different discursive horizon. Attention – or lack of attention – to specific social forms and purposes distinguishes the two» (Patrick Murray, "Critical Theory and the Critique of Political Economy: From Critical Political Economy to the Critique of Political Economy", in Beverley Best *et al.* (eds.), *The SAGE Handbook of Frankfurt School Critical Theory*, Sage, London 2018, pp. 764-783, p. 766). See the entire article for another account of the relations between the Frankfurt School and the new reading of Marx.

[53] Backhaus and Reichelt suggest an *a posteriori* reading of the genesis of the new reading of Marx that is strongly flattened on the School of Frankfurt as its only source. Backhaus, in the collection of his main works (*Dialektik der Wertform*), published in 1997, reconsiders his transcript of Adorno's seminar of the summer semester in 1962 on "Marx and the basic concepts of sociological theory" (Theodor W. Adorno, "Theodor W. Adorno on 'Marx and the Basic Concepts of Sociological Theory'. Form a Seminar Transcript in the Summer Semester of 1962", trans. by Verena Erlenbusch-Anderson and Chris O'Kane, in *Historical Materialism*, vol. 26, no. 1 (2018), pp. 154-164) and tracks in Adorno's ideas there expressed the *fil rouge* that would have oriented all his subsequent research. Similarly, Reichelt identifies the germinal moment of the new reading of Marx in Backhaus' casual discovery of the first edition of *Capital* in a Frankfurt student center in 1963 (See. Helmut Reichelt, *Neue Marx-Lektüre. Zur Kritik sozialwissenschaftlicher Logik*, VSA-Verlag, Hamburg 2008, p. 11). See Elbe, *Marx im Westen* cit. for a critique of this reductionist position.

[54] See Riccardo Bellofiore and Tommaso Redolfi Riva, "Hans-Georg Backhaus: The Critique of Premonetary Theories of Value and the Perverted Forms of Economic Reality", in Best *et al.* (eds.), *The SAGE Handbook of Frankfurt School Critical Theory* cit., pp. 386-401, p. 386-388.

[55] Quoted in *ibid.*, p. 388.

[56] *ibid.*

real abstraction by Alfred Sohn-Rethel[57]. Third, the critique of positivism, understood in a broad sense, as naïve epistemology which considers its categories immutable and trans-historical. This critique comes along with the reflection on the capitalistic social conditions of the genesis of thought forms (both at the level of science and the level of everyday consciousness of social actors). The question here, also related to the fetishism, is «why can thought – in everyday life or philosophical thinking – not adequately grasp its own capitalistic social conditions?»[58].

Ultimately, the New Marx Reading draws and further develops these insights, while at the same time, manages to overcome Frankfurt tradition deficiencies, thanks to an actual effort in understanding the connection with the critique of political economy and in reconstructing of Marx's analysis of capitalism, thus going beyond the horizon of critical political economy.

2.2 SOCIAL *FORMANALYSIS* AND SOCIAL FORMS

In the previous section, we have briefly sketched the peculiarity of the method of social form analysis. We can now go on deepening its presentation, start by saying what this method and its type of explanation are not. Following Blanke, Jürgens and Kastendiek[59], it is possible to distinguish two kinds of explanation of the determination of a form, or – loosely speaking for now – of the genesis of a "sphere" (say, for example, the "sphere" of the state): a historical-typologizing explanation and a functional one. The first kind retraces the form-determination in the historical process and considers it as a result of development so that it can be typologically generalized (e.g. the state as the outcome of modern history). The second one reconstructs one or more functions which the "sphere" fulfills in the context of social systems and takes the existence of that "sphere" be explained by this function or functions which are held valid for all sort of human societies (e.g. the function of taking binding decision for the existence

[57] See Alfred Sohn-Rethel, *Intellectual and Manual Labour: A Critique of Epistemology*, trans. by Martin Sohn-Rethel, Humanities Press, Atlantic Highlands 1978.
[58] Frank Engster, "Critical Theory and Epistemological and Social-Economical Critique", in Best *et al.* (eds.), *The SAGE Handbook of Frankfurt School Critical Theory* cit., pp. 750-763, p. 751. On forms of thought see below.
[59] Blanke *et al.*, "Form and Function of the Bourgeois State" cit., p. 113 ff.

of the state). Contrary to these approaches, a Marxian method certainly does not commit the mistake of adopting as the point of departure for its explanations «the standpoint of the phenomena in their finished forms»[60], rather it searches for their conditions of existence in some determined requirements of capitalist social complexes. Thus, social form analysis aims at «theoretically reconstructing the entire historical-social formation»[61]. The analysis must determine: first, *whether* a given social form belongs amongst capitalist society in its "ideal average", i.e. whether it belongs amongst its essential forms. To answer this question the inquiry must work out from the capitalist commodity production, or from structural constraints imposed by the capital relation, such as impersonality, reification/naturalization and specific separations, «those conditions which make the genesis of a certain form necessary»[62]. Secondly, the form analysis has to establish *how* the different forms relate to each other as necessary forms in the reproduction of the society itself.

> The aim of the analysis is not, however, to realize in retrospect the 'course of history' but to present the forms in the context in which they stand 'logically', that is, in which they reproduce themselves under the conditions of a particular historically concrete form of society[63].

It is easy to see here that this method deals with the demarcation and relation between "logical" analysis and "historical" analysis, admittedly an issue which raises difficulties; the very possibility of drawing such demarcation being disputed[64]. The most basic objection to form-analysis approach, thus, is the charge of ahistoricity:

> If form analysis is to be understood as purely logical and historical analysis as empirical, this will not help us to develop a historical materialist theory of the development of the [social forms][65].

In order to contest this objection is crucial to comprehend correctly

[60] Karl Marx, *Capital. A Critique of Political Economy. Vol II*, trans. by David Fernbach, Penguin Classics, London 1992, p. 294.
[61] Blanke *et al.*, "Form and Function of the Bourgeois State" cit., p. 118.
[62] *ibid.*, p. 119.
[63] *ibid.*, pp. 118-119.
[64] See the introduction of Holloway and Picciotto, *State and Capital* cit.
[65] *ibid.*, p. 22.

the way "logical" and "historical" interrelate in the form-genetic method. According to Kittsteiner[66], this method has four "historical implications":

1. its object is not a historical becoming, nevertheless is historical-social, non-natural and non-eternal;
2. inner historicity of capital, its "logical temporality": the immanent direction of development given by the system of forms (structural historical dynamics of "the development of productive forces, the rate of profit", etc.,);
3. external historicity of capital: the historically specific preconditions from which capitalist social complexes proceed which could not be originally produced by capital itself but only reproduced later on by the complex (e.g. the separation of the immediate producers from their means of production
4. historical as empirical-factual: the sphere of the historical contingency of singular events, for example, the "real movement of competition".

Taking into account altogether these historical implications entails to acknowledge that social forms themselves always come out from historical processes, struggles, and social actions, thus it is misleading seeing their genesis in terms of some intrinsic logic concerning capitalist commodities production or seeing the social actors in these processes as potentially capitalistic. In this sense, it is true that «form analysis is analysis of an historically determined and historically developing form of social relations»[67]. For example, the political form of the bourgeois state is related to the structures and crises of the *Ancien Régime* social complex. In this sense bourgeois state was the result of historical processes, struggles and actions peculiar to this kind of society[68].

Therefore, form-analysis *per se* has not the pretension of explaining the institutions, the concrete political processes, the different class compositions and their organization, etc., of capitalist social complexes, neither how and

[66] See Heinz-Dieter Kittsteiner, ""Logisch" und "Historisch": Über Differenzen des Marxschen und Engelsschen Systems der Wissenschaft", in *Engels' Rezension "Zur Kritik der Politischen Ökonomie" von 1859* (1977), pp. 1-47.
[67] Holloway and Picciotto, *State and Capital* cit., p. 27.
[68] See Heide Gerstenberger, "The Historical Constitution of the Political Forms of Capitalism", in *Antipode*, vol. 43, no. 1 (2011), pp. 60-86.

why the historical constitution of money, state, etc., occurred, nor their functions. Nevertheless, this analysis allows framing the overall structural conditions which orientate institutional configurations, functions, power relations, rationalization models, and individual action. Thus, this approach is not a ready-made "theory of society", but we can say that it is its categorial basis. To put it in other words, on the level of form-analysis is possible to derive the «system-limit» (of the economical or the political, for example, and of CSC as a whole) because this is fixed «by the form determinations developing out of the relation of capitalist production»[69].

> On this level of abstraction, however, we can give only the *general points of departure* [. . .]. The question of how this formation takes place in detail, how it is transposed into structure, institution and process [. . .], can no longer be answered by form analysis. It would have to be made the subject of historical analysis[70].

It will be a task of the following sections of this chapter to enlighten the relation between form-analysis and historical one, enriching the macro-logic of capitalist social complexes in order to clarify how it relates to concrete and historical institutional constellations, processes, social action. This enrichment is necessary if we wish to operationalize this macro-logic/theoretical view of the social complexity and translate it into empirical research, answering the methodological problem of «how the 'logic' of capitalist society theoretically reconstructed [. . .] is to be 'applied' to the analysis of historical and concrete forms of appearance»[71].

Up till now, our exposition has been limited to describe how the form-genetic method works, what it is, and which is its aim. But we have not said yet *why* this sort of analysis is needed. Why do we need to theoretically reconstruct, to make a logical "anamnesis of the genesis" of value, money, the state, etc.? This is to ask also: why introducing the question of the form, as Marx did, really has been a revolution not only for the science of political economy but also for the critique of capitalist society as a whole in the direction of a social revolution?

The answer lies in the phenomenon of fetishism characterizing the

[69] Holloway and Picciotto, *State and Capital* cit., p. 139.
[70] Blanke *et al.*, "Form and Function of the Bourgeois State" cit., p. 119.
[71] *ibid.*, p. 114.

capitalist social complexes. To put it in the first instance in an extremely simplified way, which will be properly explained in a moment: in capitalist societies social forms such as commodity, money, capital, etc., manifest as mere things, objects which have always existed in such a way (e.g. commodity as the product of labor, money as mean of payment, capital as an amount of money), while actually they are «social hieroglyphics»[72] that need to be deciphered. Thus, form-analysis can be seen «as a critique of fetishism»[73] which can dissolve the fetishized objectivity of social forms[74].

But, what are social forms? and how are they related to fetishism? Of course, here we are talking of the notion of social form solely as it is conceptualized inside the framework of the New-Marx Reading, leaving aside all the other meanings this notion has in other contexts. However, given the (relative) heterogeneity of this framework, we find some differences even inside the New-Marx Reading itself. Nevertheless, these various definitions share the same core: value, money, capital, right, state, etc., (that is, the capitalistic social forms) are «congealed»[75], condensed[76], objectified[77] social relations between individuals which vanish in their appearance.

The uniqueness of Marxian conception expressed in *Capital*, which all these adjectives capture, consists in affirming not only that social forms are relations between individuals but also that they are relations «concealed beneath a material [*dinglicher*] shell»[78], i.e. *mediated by things*. As Heinrich underlines[79], if one considers *Capital*'s essential aspect exclusively to be the idea that economical forms are expressions of determined social relations, which are ultimately class struggle, reduces its analysis to the 20-year-old

[72] Marx, *Capital I* cit., p. 167.
[73] Alexander Neupert-Doppler, "Society and Political Form", in Best *et al.* (eds.), *The SAGE Handbook of Frankfurt School Critical Theory* cit., pp. 816-833, p. 819.
[74] As it will become clear in a moment, form-analysis works on the epistemic side of fetishism, i.e. on naturalization only. In order to dissolve the concrete reification a change in daily practices of (re)production of life is needed.
[75] Sonja Buckel, *Subjektivierung und Kohäsion. Zur Rekonstruktion einer materialistischen Theorie des Rechts*, Velbrück Wissenschaft, Weilerswist 2007, p. 234.
[76] See Sonja Buckel, "The Juridical Condensation of Relations of Forces: Nicos Poulantzas and Law", in Gallas *et al.* (eds.), *Reading Poulantzas* cit., pp. 154-169.
[77] See Hirsch and Kannankulam, "The Spaces of Capital" cit.
[78] Marx, *Capital I* cit. p. 167.
[79] Michael Heinrich, *¿Cómo leer "El Capital" de Marx?: indicaciones de lectura y comentario del comienzo de "El Capital"*, trans. by César Ruiz Sanjùan, Escolar y Mayo, Madrid 2011, pp. 185-186.

one of the *Communist Manifesto*. The point of departure of the exposition in the *Manifesto* is classes and class struggle, which Marx and Engels assume can explain all the rest. On the contrary in *Capital*, Marx has reached the conclusion that, since the relations between individuals are «concealed beneath a material [*dinglicher*[80]] shell», they cannot constitute the starting point, rather they are a result which has to be developed. For this reason, in *Capital* the chapter titled "Classes" is the last – left incomplete – of the third book. In *Capital* Marx's analysis abandons the misconception, expressed in the *Manifesto*, that, in capitalism, the social relations are readily transparent and that only the manipulation of the rulers disguises them. The specificity of social relations under capitalistic conditions in *Capital* is their being «concealed beneath a material [*dinglicher*] shell», reified, etc. They are not regarded as transparent at all.

In order to better understand this idea of objectification, "thingization", etc., drawing on these authors, we can give a more complete definition of social forms and then analyze its various components.

> *Social forms are, basically, modes of organizing fundamental social relations (i.e. modes of socialization* [Vergesellschaftung], *in which social cohesion is expressed), that constitute themselves in daily practices (i.e. the processes of material production and reproduction of life). Through the processes of reification and naturalization that occur in CSC they solidify and fix this particular layout of the relations, with its burden of domination, and perpetuate it*.

1) Social forms emerge from determined *daily practices* which are the, historically specified, processes of material reproduction in capitalism. The material reproduction in CSC is assigned to capitalist commodities production which is based on specific practices: a) individual labor spent privately and on trade + b) the exploitation of surplus labor.

a) The manner in which production and circulation work in capitalism is, actually, anarchic because it is based on private and isolate labor: there is no common coordination in advance in accordance with needs. There are, instead, private independent producers who expend their labor as private labor, who act with the product of this private labor as private property not having only a use-value but also value which is expressed in money and

[80] This is the adjectival form of the German word "*Ding*" which means "thing". Sometimes Marx uses also the synonym adjectival form "*sachlich/e*" derived from "*Sache*".

who exchange it on the market. Independent producers make individual decisions without consulting each other. Each of them tries to *guess* in the most precise possible way (thanks to market research, for example) what and how much they need to produce, what and how much other producers produce and how much demand there is on the market. Then they bring their commodities on the market and exchange them, because, due to the social division of labor, they are actually dependent on one another: everyone needs each other's product. Only on the market, only *ex post*, if they actually exchange their products as commodities, they find out if their individual labor is part of the total labor of society, that is, if it is recognized as socially useful.

b) The practices related to the labor activity: the workers work under the control of the capitalist who has purchased their labor-power; the products of the labor process, i.e. certain use-value, are property of the capitalist and not of the workers, their immediate producers; these use-values are produced only in view of surplus value; the workers work longer than it is necessary for their own reproduction[81].

The social agents involved in these practices can be completely unaware of what they are actually doing. Regardless of what people think and want, they always act *de facto* as commodity owners. For example, as to value form, Marx says:

> People do not therefore bring the products of their labour into relation with each other as values because they see these objects merely as the material [*sachliche*] integuments of homogeneous human labour. The reverse is true: by equating their different products to each other in exchange as values, they equate their different kinds of labour as human labour. *They do this without being aware of it*[82].

2) *Reification and naturalization*. These are the two concepts in which it is possible to better analyze the idea of objectification, "thingification" of social relations and the notion of fetishism[83]. Reification is the process of

[81] This is merely a sketch; for a proper account of the capitalist process of production, see Heinrich, *Karl Marx's Capital* cit., pp. 81-131.
[82] Marx, *Capital I* cit., pp. 166-167. [emphasis added, translation amended]
[83] Marx first, and with him also fine interpreters such as Heinrich, Fischer, and Lindner, collapse the two distinct phenomena of reification and naturalization into the notion of fetishism. This entails an important confusion about the reception of the Marxian

objectification of social relations in things and institutions (that occurs because of the general organization of material reproduction and distribution in CSC: private labor based on the social division of labor and trade) and hence the vanishing of the same relations in the process.

It is generally true what Marx says about the money form:

> It is [. . .] precisely this finished form of the world of commodities – the money form – which conceals the social character of private labour and the social relations between the individual workers, by making those relations appear as relations between material [*sachlich*] objects, instead of revealing them plainly[84].

This process means, at the same time, a motion of «subjectification of the things in which these social determinations are represented and concealed»[85], i.e. «the acquisition by the thing of the function of motor of the process»[86].

For naturalization is meant the consequent epistemic phenomenon that makes those reified forms appear as natural and trans-historical. Since we are dealing here with the epistemic side, we encounter no longer social forms as congealed social relations *per se*, rather as "categories": the scientific concepts which claim to detect those relations. In this sense, value, money,

concept, especially in light of an alleged Marx's irrational social ontology, whether to refuse it (see Marco Iorio, "Fetisch und Geheimnis. Zur Kritik der Kapitalismuskritik von Karl Marx", in *Deutsche Zeitschrift für Philosophie Zweimonatsschrift der internationalen philosophischen Forschung*, vol. 58, no. 2 (2010), pp. 241-256) or to adhere to it (see Stephan Grigat, *Fetisch und Freiheit*, ça ira, Freiburg 2007): is fetishism or is not only a phenomenon of consciousness, is it capitalist reality "*per se* false" or is its perception only? However, all these questions regarding the "ontological" or "epistemic" character of the concept of fetishism can be resolved using the concept of reification for the phenomenon of real objectification and the concept of naturalization for its cognitive effects. See Ingo Elbe, "Il concetto di reificazione nella critica dell'economia politica di Marx", in *Lo spettro è tornato. Attualità della filosofia di Marx*, ed. by Pietro Garofalo and Michael Quante, trans. by Pietro Garofalo, Mimesis, Milano – Udine 2017, pp. 95-109. Marx does not himself use the word "naturalization", while the term "reification" first appears in *Capital*'s third chapter.

[84] Marx, *Capital I* cit., pp. 168-169.

[85] Jacques Rancière, "The Concept of 'Critique' and the 'Critique of Political Economy' (from the *1844 Manuscript* to *Capital*)", trans. by Ben Brewster, in *Economy and society*, vol. 5, no. 3 (1976), pp. 352-376, p. 360.

[86] *ibid.*, p. 362. «The circuit of money-capital is the one which best expresses the capitalist process. In fact it is a peculiarity of this process that it has as its principle the self-expansion of value, as the circuit from M to M ′ clearly expresses. But this determinate form of the process of reproduction of capital, the process of self expansion of value *made possible by the relations of production of capital and wage-labour*, tends to disappear in its result» (*ibid.*, p. 356). [emphasis added]

capital, credit, etc., are «the categories of bourgeois economics»[87] as well as the state is the category of political science. However, since «reflection on the forms of human life [and] also scientific analysis of those forms [. . .] [begin] *post festum*, and therefore with the results of the process of development ready to hand»[88], these categories embed those finished forms, perceiving them (precisely because of the process of reification) as «natural form of social life [. . .] immutable, but of their content and meanings»[89]. Scientific analysis perceives them as a matter of course to be the obvious object of that particular field of knowledge, only focusing on their concrete content and never discussing the *form-determinations* of their subject matter. Of course, these categories are also the categories of everyday life of social agents: everyone talks about money, credit, law, state, prices, etc., and act on their basis; the difference with science is that the common sense does not even ask about the meaning and the content of these expressions. Both knowledges and common sense are doing right in this, they are not misleading, because social forms as categories are «forms of thought which are socially valid, and therefore *objective*»[90]. As we have quickly said above, the social forms orientate social agents' rationalization models (thoughts and representations) and individual action. The conditions of the genesis of those forms themselves (see point 1) vanish in the appearance of the forms. All these social practices seem something so much patent that one can hardly represent something else. Thus, the forms themselves have social validity, but only «for the relations of production belonging to this historically determined mode of production, i.e. commodity production»[91], even if, as effect of the capitalist organization of the production process itself, it seems they are valid for every society.

Sic stantibus rebus, fetishism, as a – conceptually speaking – combination of reification and naturalization, is real. Marx clearly states: «To the producers, therefore, the social relations between their private labours *appear as what they are*, i.e. they do not appear as direct social relations between

[87] Marx, *Capital I* cit., p. 169. In Marx's definition an economic theory is "bourgeois" «in so far as it views the capitalist order as the absolute and ultimate form of social production» (*ibid.*, p. 96).
[88] *ibid.*, p. 168.
[89] *ibid.*
[90] Marx, *Capital I* cit., p. 169.
[91] *ibid*.

persons in their work, but rather as material [*dinglich*] relations between persons and social relations between things»[92].

It is not merely a state of false consciousness or ideology in the traditional sense, understood as a curtain or a bundle of illusions which simply reflect an *a posteriori*, inverted and mystified version of the social reproduction process[93]. The fetishized forms, constituted through the daily practices and the behaviors of individuals unaware of what they are doing, are the *necessary* form in which capitalistic social relations manifest themselves to people living under capitalist conditions. This is because fetishized social forms set specific conditions of possibility for actions and rationalization of individuals, guiding behavioral orientation and leading to *basic* subjectivation processes[94]. This means that the forms turn individuals into subjects, i.e. intentional beings considered virtually capable of this or that type of behavior and reasoning. For example, the economic forms constitute individuals as commodity owners, or wage-laborers and capitalists who think and act in terms of price, wage, profit and so on; the legal-political forms constitute individuals as free citizens and owners of their person, i.e. owners of rights[95]. The social *formanalysis* is thus also a theory of the constitution of subjectivity in the capitalist process of social production. It is a «theory of capitalist subjectivity»[96]. It is important here not to overload

[92] Marx, *Capital I* cit., pp. 165–166. [emphasis added]

[93] See Jan Rehmann, *Theories of Ideology: The Powers of Alienation and Subjection*, Brill, Leiden 2013.

[94] Subjectivity is more conventionally associated with the problem of self-knowledge, of personal experience, of interiority, or, in philosophy, is often related to the question concerning the epistemic condition of certain objects appearing to an individual, for example in the terrain of phenomenology. For this reason, it is important to underline that the problem of subjectivity is approached here from the standpoint of critical theory, within a Marxian lineage. For an introduction to this perspective see William Callison, "Subjectivity and Power: Marxist Lineages", in *A Companion to Critical and Cultural Theory*, ed. by Imre Szemann *et al.*, John Wiley & Sons, Hoboken 2017, pp. 173-189.

[95] It has been shown (Pašukanis, *The General Theory of Law and Marxism* cit.) that this double constitution of the subject in CSC is not by chance; rather, the economic constitution of the individual as commodity owners (both in the sphere of circulation, as owners of commodities in general and in the sphere of production as owners of the means of production and owners of labor-power) and the legal one as rights' owners are necessary to each other. This double constitution is guaranteed by the state which stands above society as an extra-economic force, an impersonal apparatus which secure the right to private property for everyone.

[96] Jacques Rancière, "The Concept of 'Critique' and the 'Critique of Political Economy' (From the 1844 Manuscripts to Capital)", in *Theoretical Practice*, no. 6 (1972), pp. 31-49, p. 32.

the meaning of the expression "theory of capitalist subjectivity". As far as social forms are concerned the level of this constitution is extremely abstract. Also with respect to subjectivity we are dealing with the "system-limit" that allows us to talk of capitalist subjectivity as such. Marx does not even talk about subjects: in *Capital* he speaks of the person in theatrical terms of "personification", "character mask", "*dramatis personae*", "bearer" [*Träger*] of social relations[97]. This perspective, as will become clear in what follows, is not arbitrarily chosen; rather it goes hand in hand with Marx's analysis of the specific mode of socialization in CSC. This idea is also readable as a formulation of a specific program of the mode of presentation in *Capital* – which deeply contrasts the anthropologism and individualism of (classic) political economy –: the form-determinations has to be conceptually developed without recourse to the behavior and goals of the individuals involved. This is not to say that social forms come out of nowhere: obviously every social determination can only exist through the actions of the individuals. The question is, however, whether the social forms are produced *because* the actors have set themselves the goal, so that the form-determinations can only be explained with regard to these goals, or whether these forms reproduce in the actions of actors without they being completely aware of what they are doing.

This conception implies what could be called a minimal psychological theory suitable for the conditions of capitalist social complexes. In *Capital* subjects enter the scene only in the second chapter devoted to the process of exchange as they bring the commodities on the market: «our commodity-owners think like Faust: 'In the beginning was the deed'. They have therefore already acted before thinking»[98]. As Basso notes: «the irruption of subjects is thus devoid of any 'humanist' emphasis, since they are examined on the basis of the immanence of the deed»[99]. So, the basic element of this theory is the *action* performed by the subjects and not their consciousness

[97] Marx's identification between person and mask – which is due to the fact that the Latin word *persona* refers to the Greek one *prosopon*, i.e. "mask" – is largely drawn on Hobbes' account of the topic. See Luca Basso, *Marx and the Common: From Capital to the Late Writings*, trans. by David Broder, Brill, Leiden 2015, pp. 40-49. For a deepening of the discourse with regard to contemporary corporations' status of *persona* see Mark Neocleous, "Staging Power: Marx, Hobbes and the Personification of Capital", in *Law and Critique*, vol. 14, no. 2 (2003), pp. 147-165.
[98] Marx, *Capital I* cit., p. 181.
[99] Basso, *Marx and the Common* cit., pp. 23–24.

or mental states. Through the immanence of the inter-actions between subjects – *historically determined practices activated by individuals* – the process of fetishization (reification + naturalization) of social relations occurs: basic social objects and categories of the fields of knowledge and everyday life emerge and, since their structuring action, have cognitive effects, shaping representations and consciousness, thus, ensuring the functioning and reproduction of the social complex[100].

> The fetish character [of social forms] is not an effect of the alienation of consciousness, but rather an effect in and on consciousness produced by the dissimulation of social relations within and through the way in which they appear. The basis of fetishism is found outside the sphere of consciousness, in the objective reality of historically determinate social relations[101].

If we analytically isolate this frame of emergence, we see a movement from the outside to the inside. Subjectivity is considered as constituted by the social process, by the world, and not the other way around. The deeds from which Marx starts are already conformed to the rationalization and behavioral orientations set by the forms themselves. The form-determination, thus, must be analyzed first before the conscious behavior of subjects, their motivations and calculations are addressed.

> If the constitution of objectivity in fetishism does not depend on the prior givenness of a subject, a consciousness or a reason, it does, by contrast, constitute subjects which are a part of objectivity itself or which are, in other words, given in experience *alongside 'things'*, alongside commodities, and *in a relation to them*. These subjects are not constituent, but constituted; they are quite simply 'economic subjects' or, more exactly, they are all individuals who, in bourgeois society, are first of all economic subjects (sellers and buyers and therefore owners, [. . .]). The reversal effected by Marx is, then, complete: the constitution of the world is not, for him, the work of a subject,

[100] Marx's psychological perspective has been described as: objective, social, externalist, practical and materialist (see David Rubinstein, *Marx and Wittgenstein: Social Praxis and Social Explanation*, Routledge, London 2013). It is a psychological theory that is mostly played outside the consciousnesses and minds, negating, in a sense, its own subject matter. It is a theory of the genesis of subjectivity where the subject is practical, anonymous and by definition not conscious of itself, namely a non-subject (see Étienne Balibar, *The Philosophy of Marx*, trans. by Chris Turner, Verso Books, London-New York 2007, especially pp. 66-67).

[101] Basso, *Marx and the Common* cit., pp. 17-18.

> but a genesis of subjectivity (*a* form of determinate historical subjectivity) as part (and counterpart) of the social world of objectivity[102].

It is important to make explicit the range of application of this conception and its own object to avoid (the frequent) accusations of reductionism and economic determinism. Such a conception deals exclusively with the constitution of subjectivity and its rationalization models relative to the field of action of the social, which does not cover the totality of the sphere of the "mind", its dynamics and processes. There is an «incompressible minimum of individuality»[103].

Now, we have said that fetishism is real, but one must not forget that it is so only under the conditions of the capitalist social process. Since fetishized social forms emerge from capitalist daily practices, being the necessary consequence of determined social practices[104], if these practices fade away, that is to say, if capitalism, as a form of society, comes to an end, also fetishism (in its reification sense) will end. At the same time, as we have said, fetishism (in its naturalization sense) is not, in principle, impenetrable. Here we find the work of form-analysis.

> Fetishism is also not a completely closed universal context of deception from which there is no escape. Rather, it constitutes a structural background that is always present, but affects different individuals with varying strength and can be penetrated on the basis of experience and reflection[105].

As will become clearer in the following, the interactions between subjects also possess an independent dynamic so that «they can lead to processes of learning and radicalization in which the capitalist system as a whole is called into question»[106].

[102] Balibar, *The Philosophy of Marx* cit., p. 67.
[103] *ibid.*, p. 122.
[104] «I call this the fetishism which attaches itself to the products of labour as soon as they are produced as commodities, and is therefore *inseparable from the production of commodities*» (Marx, *Capital I* cit., p. 165, [emphasis added]). Marx analysis of fetishism is not reduced to commodities, i.e. the sphere of circulation, but it is extended to money (in the second chapter) and to capital (in chapter 48 of the third volume, entitled "The Trinity Formula" which we will focus on in the next chapter) – thus fetishism is extended to the mode of capitalist production as a whole, which has commodity as its «elementary cell». Value is the simplest abstraction, which, though, «contains in an embryonic way all the inner qualities and contradictions» (*ibid.*, p. 16) of those other categories.
[105] Heinrich, *Karl Marx's Capital* cit., p. 185.
[106] *ibid.*, p. 195.

3) *Solidify and fix*. As capitalist commodities production establishes itself to a large extent, the social context (actually the result of relations between individuals that comprise society), through the reified and naturalized social forms, undergoes a process of objectified *autonomization* in front of the individuals: it is not under their control, rather it controls people.

> Their [of the exchangers] own social movement has for them the form of a movement made by things, and these things, far from being under their control, in fact control them[107].

> Their own relations of production [. . .] assume a material shape [*sachliche Gestalt*] which is independent of their control and their conscious individual action[108].

4) *Burden of domination*. As said, social forms are rooted in daily practices that express certain relations between individuals. At a first glance, our spontaneous glance of people that live in a capitalist social complex, these practices (see point 1) are plain, neutral and fair[109]: we go on the market and buy commodities someone else is selling. In this transaction we face each other as equal and free members. On the market we find a vast amount of commodities we can choose, produced by different companies which compete with each other. In order to buy them, we use the money we earned as wage for our labor in accordance with a job contract we have *freely* signed. The contract is the common legal expression of this equal exchange between one property of mine and one property of the employer (labor-power=wage) made in the name of the utility of each contractor[110].

[107] Marx, *Capital I* cit., pp. 167-168. [translation amended]
[108] *ibid.*, p. 187.
[109] The fact that the whole economy seems to consist only of acts of buying and selling, i.e. of the sphere of circulation, disregarding the sphere of production and the one of consumption, is a specific real effect of the capitalist production process itself. The sphere of circulation, only concerned with transactions, appears «as that which is immediately present on the surface of bourgeois society» (Karl Marx, *Outlines of the Critique of Political Economy (Rough Draft of 1857-58)*, in Marx *et al.*, *MECW* cit., pp. 49-537, p. 186).
[110] «The sphere of circulation or commodity exchange, within whose boundaries the sale and purchase of labour-power goes on, is in fact a very Eden of the innate rights of man. It is the exclusive realm of Freedom, Equality, Property and Bentham. Freedom, because both buyer and seller of a commodity, let us say of labour-power, are determined only by their own free will. They contract as free persons, who are equal before the law. Their contract is the final result in which their joint will finds a common legal expression. Equality, because each enters into relation with the other, as with a simple owner of commodities, and

We, as individuals living in capitalist societies, are actually free: we are subjects of rights. There is no personal domination, no personal relationship of force: we are not obliged to provide services or payments to another person due to birth (or other fixed) status. Service obligations or payments only arise through voluntarily signed contracts which can be dissolved at any time. The singular wage-laborer enters into contact with a capitalist in a free and equal way, without any relation of personal dependency with that specific capitalist.

Following Marx and using an over-simplification in order to highlight the qualitative difference, the peculiarity, of the relation of domination in the capitalist social complexes, it is possible to make a comparison with the pre-capitalist societies where the domination – the ordering rule – was direct, personal and unmediated. For example, in a slave-owning society the slave is personally non-free, he/she is property of another person, the slave owner has an absolute personal rule over the slave. The situation is similar in feudalistic contexts: there is a personal dependency between the landlord and "his" servants. Thanks to a military office, an administrative one or a juridical one, he has direct authority over them, so that they are obliged to serve and pay their landlord, for example, or they are not allowed to leave their plots, they need permission to marry and their children are born into the same relation of dependency, i.e. the serf's child is serf again. In both cases there is not a sphere of rule existing independently of concrete personal relationships and also there is not a separation between "politics" and "economy": the political domination went alongside the economic exploitation.

Something that goes unnoticed in this picture is that in CSC the majority of people are not only legally free but also free in a material sense, i.e. from any other substantive properties (necessary to survive). We do not have a vast amount of money nor means of production with which we can produce by ourselves, be for sale, or subsistence. Marx uses the expression «worker free in a double sense»[111] to capture this situation. It is for this reason we

they exchange equivalent for equivalent. Property, because each disposes only of what is his own. And Bentham, because each looks only to his own advantage. The only force bringing them together, and putting them into relation with each other, is the selfishness, the gain and the private interest of each» (Marx, *Capital I* cit., p. 280).

[111] *ibid.*, p. 272.

voluntarily stipulate contracts to receive wages to buy the necessary to live. We are driven to sell our only property: labor-power – i.e. the *ability to labor* that, under the conditions of commodity production, is the source of value – treating it as a commodity. On the other side, we find the capitalist: the owner of substantive property (namely the means of production and money) who can buy it in order to extract surplus value and realize the «unceasing movement of the profitmaking»[112], the movement of the capital. This specific social relation between classes (a class of property owners and a class of propertyless, but legally free individuals) is what Marx refers to as *capital relation*[113]. Even if one feels a kind of personal dependency on a particular capitalist, due to especially unfavorable working circumstances where the capitalist himself takes advantage of low wages, etc. this situation should not be confused with the personal dependency of pre-capitalist modes of production. Here the power of the money owner over the person who does not have money is given by the actual dependency on the supply of money, it is not a direct and personal constraint. As Marx puts it effectively in the *Grundrisse*:

> The power which each individual exercises over the activity of others or over social wealth exists in him as the owner of exchange values, of money. The individual carries his social power, as well as his bond with society, in his pocket[114].

Thus if the money owner loses his money, then he no longer has any power over the seller of the labour-power. Moreover, if the capitalist himself wants to survive as capitalist he too is forced into the restless movement of profiteering by the iron laws of competition[115].

This way, the decisive relations of domination and exploitation are not personal but impersonal, mediated by things: people submit to "inherent necessities", to the «silent compulsion»[116] of personified things and

[112] *ibid.*, p. 254.
[113] At the level of *Capital*'s depiction, Marx's usage of the term "class" is purely *structural*: it simply refers to positions within the social process of production based on the ownership or non-ownership of substantive property. In its «ideal average» – at the form level – capitalism does not need nor allowed a fully developed "class-theory". See on this point Heinrich, *Karl Marx's Capital* cit., pp. 191-198.
[114] Marx, *Grundrisse* cit., p. 157.
[115] See Heinrich, *Karl Marx's Capital* cit., p. 104, ff.
[116] Marx, *Capital I* cit., p. 899. The entire quote is significant: «The silent compulsion of

institutions, which, at the same time, express people's social connection and participation in social wealth. Going back to Marx's last quote: «the individual carries [...] his *bond* with society in his pocket», but he/she equally can lose it.

However, it took time to reach this «silent compulsion». If we investigate the conditions that have made this state of affair historically possible, we find out social relations of direct antagonism, violence, coercion, dispossession, domination: «if money [...] 'comes into the world with a congenital blood-stain on one cheek', capital comes dripping from head to toe, from every pore, with blood and dirt»[117]. Marx illustrates the extremely violent historical formation of the capitalist conditions of commodities production referring to the example of England. This violent process, which Marx sketches at the end of the first volume of *Capital* under the title "The So-Called Primitive Accumulation", was by no means a peaceful result of the market but was actively supported by the state. It involved as to the case-study of England: expropriation of small producers (small peasants and artisans) by means of their expulsion from their plots; enclosure, monopolization and concentration of vast plots of land; appropriation of common land and transformation of the field into pasture; expropriation of the Church as feudal property owner with the consequent pauperization of its clientele; transformation of feudal clan property into capitalist private property; imprisonment and imposition of forced labor on the poor[118]. From this process – and from all the other similar primitive accumulation processes that occurred in the course of the global spread of capitalism[119] – the capital relation is formed. Thus, it is this specific relationship between social classes that underlies capitalist production process and capitalist societies as a whole and which is constantly reproduced by it (once CSC stand on their feet), by means of reified and naturalized social forms that

economic relations sets the seal on the domination of the capitalist over the worker. Direct extra-economic force is still of course used, but only in exceptional cases. In the ordinary run of things, the worker can be left to the 'natural laws of production', i.e. it is possible to rely on his dependence on capital, which springs from the conditions of production themselves, and is guaranteed in perpetuity by them».

[117] *ibid.*, pp. 925-926.

[118] See Valeria Bruschi *et al.*, *PolyluxMarx. A Capital Workbook in Slides. Volume One*, trans. by Alexander Locascio, Karl Dietz Verlag, Berlin 2013, p. 134.

[119] «"Primitive accumulation" is not a historically singular process» (Heinrich, *Karl Marx's Capital* cit., p. 93).

autonomize the social context in front of the individuals. Marx asserts: «These presuppositions which originally appeared as prerequisites of its [capitalist production process] becoming [. . .] now appear as results of its own realisation, reality, as posited by it»[120].

5) *Perpetuate it*: To the extent that fetishized social forms orient the action and rationalization of individuals and classes in a non-transparent way for them, they make basic social antagonisms amenable to prosecution, that is, they ensure that society, despite and because of its contradictions, reproduce, but without overcoming them.

6) We can now go back to the very first part of the definition, giving a proper account of it: *modes of organizing fundamental social relations*. This expression has to do with the *constitution* of social complexity in the proper conditions of commodities capitalist production, that is, the specific type of social cohesion, of socialization in capitalist social complexes. From the previous analysis follows that this *socialization is mediated* and is expressed in the social forms themselves. In capitalist social complexes individuals cannot choose freely and consciously their mutual relationships nor they can control their social existence through immediate actions. Their social cohesion, instead, is expressed predominantly through intertwined fetishized social forms. To put it in other words, socialization is certainly realized through conscious actions of individuals (such as bringing their products on the market to exchange them), nevertheless, they do not know about the structures and form of development of the socialization itself. Therefore, in the end, socialization is not produced consciously, directly and in an unmediated way by the individuals themselves but it is obtained "behind their backs", in a mediated-impersonal way, through the fetishized forms of value, money, capital, state, law... and, it will be argued, others.

[120] Marx, *Outlines of the Critique of Political Economy* cit., p. 388. And also: «Capitalist production therefore reproduces in the course of its own process the separation between labour-power and the conditions of labour» (Marx, *Capital I* cit., p. 723); «As soon as capitalist production stands on its own feet, it not only maintains this separation, but reproduces it on a constantly extending scale» (*ibid.*, p. 874). For an analysis of the relation between primitive accumulation and capitalist accumulation, see Werner Bonefeld, *Primitive Accumulation and Capitalist Accumulation: Economic Categories and Social Constitution*, 2007, https://www.academia.edu/3427286/Primitive_Accumulation_and_Capitalist_Accumulation_Economic_Categories_and_Social_Constitution?auto_download=true&email_work_card=view-paper. Draft working paper, CSE Trans Pennine Working Group.

2.3 *DISPOSITIFS* AND POLITICS

As we have seen, the conceptual form-analysis and the discourse on social forms allow us to grasp the «system-limit» of CSC, the overall structural conditions (relatively) fixed, with their specific objectified kind of domination. The social forms express, and account for, the stability/regularity of the social. However, this level is not sufficient to develop a "(critical) theory of society" – no statements about concrete historical formations, institutions, processes, struggles can be made at this level of abstraction – even if it is necessary for it: it is its categorial basis.

Thus, the macro-logic of CSC needs to be enriched – with a movement toward the side of the variety, diversity, instability of the social – adding another dimension of analysis to clarify how social forms relate to institutional constellations so that reification/naturalization effectively occur and how social action occurs in capitalist complexes. This need is (and has been) felt by many authors in Marxist tradition – broadly intended –, and especially by the ones concerned with the issue of the state and the political and, connected to it, with the problematic of social reproduction. What are the conditions of reproduction of capitalist societies? How these conditions are historically meet? Why does reproduction work, if capitalist relations are marked by antagonism? How is it possible to break the reproduction of CSC and produce a social changing? All these questions deal with the so-called "structure and agency" problem[121], a central topic of Marxist social theory[122] as well as of "mainstream" sociology. What is the relation between the "structure" and the "agency"? Where "agency" can be understood as: «the capacity of individual and/or group actors to actively contribute to the shaping of the social»[123] and "structure" in a Giddean sense as:

> the repetition over time of the related actions of many agents [which provides] the framework, within which the action of a single agent at a

[121] See Nicholas Abercrombie *et al.*, "'Agency and Structure'", in *The Penguin Dictionary of Sociology*, Penguin, London 1984.
[122] For an account of the different conceptualizations of the structure-agency relation within the main variants of Marxist social theory see Alexander Gallas, *Dichotomy, Dualism, Duality: An Investigation into Marxist Conceptualisations of Structure and Agency*, VDM Verlag Dr. Müller, Riga.
[123] *ibid.*, p. 9.

> particular spatio-temporal point is performed. Structure qua *framework* constrains any given agent's action at a particular spatio-temporal point. (In addition, structure qua framework *enables* various actions not otherwise possible»[124].

Now, as said above, to answer this problematic the literature in the New Marx Reading current has especially drawn upon Poulantzas' tradition (and, through it, upon Gramsci's one). It is not surprising that these attempts, such as Hirsch's, which are based (or descend from) the West German State-Derivation debate turn to Poulantzas, given his silent dialogue with authors[125] precisely located within Marxian form-analysis approach. It is possible to say that, generally speaking, these attempts refer to this other dimension with the label of *institutionalization*. For example, regarding the political form, the state is seen as «a spatial-temporal institutionalisation of the political form»[126], or the «concrete [. . .] structure of the state and its apparatuses» is seen as a result of «process of institutionalization» of the political form[127].

Although the perspective presented here is largely consonant with the general approach of these theories and significantly draws upon them, it has been preferred to define this other dimension of the macro-logic of the CSC using the Foucauldian concept of *dispositif*. The choice of this concept, instead of the notion of institutionalization, finds its justification in the fact that it has the advantage of holding together the three fundamental aspects of a "(critical) theory of society": knowledges, powers, subjects/subjectivations, which are also the dimensions involved in social forms, only on another stage in the analysis.

Before proceeding with the development of the discourse on the *dispositifs*, it is useful to trace the paths which have led us to this theoretical integration. First there is Poulantzas' "silent dialogue"[128] with Michel

[124] Seumas Miller, "Social Institutions", in *The Stanford Encyclopedia of Philosophy*, ed. by Edward N. Zalta, Summer 2019, `https://plato.stanford.edu/archives/sum2019/entries/social-institutions/`.
[125] See Joachim Hirsch and John Kannankulam, "Poulantzas and Form Analysis: On the Relation Between Two Approaches to Historical-Materialist State Theory", in Gallas *et al.* (eds.), *Reading Poulantzas* cit., pp. 56-71.
[126] Sonja Buckel *et al.*, *The European Border Regime in Crisis: Theory, Methods and Analyses in Critical European Studies*, Studien, Rosa-Luxemburg-Stiftung, Berlin 2017, vol. 8, p. 10.
[127] See, for example, Hirsch and Kannankulam, "The Spaces of Capital" cit., p. 13.
[128] See Buckel, "The Juridical Condensation of Relations of Forces" cit., p. 6.

Foucault. Actually, Poulantzas' dialogue with Foucault is not that silent. Although the Marxist scholar rejects Foucault's general epistemological and theoretical project, in his own masterpiece *State, Power, Socialism*[129] (1978) he explicitly engages, both positively and negatively, with Foucault's works on discipline and power-knowledge, especially with *Discipline and Punish*[130] (1975) and *The History of Sexuality: The Will to Knowledge*[131] (1976). The reverse is not the case: Foucault never refers to Poulantzas' work, even if one can find certain deliberately and provocatively covert references to some other contemporary Marxist currents (Balibar mentions: Sartre, Merleau-Ponty, the Frankfurt School and Althusser[132]). However, it has been pointed out[133] that in the posthumously published seminars *Security, Territory, Population*[134] of 1978 and *The Birth of Biopolitics*[135] of 1979, in correspondence with the governmentality turn, Foucault implicitly and, again covertly, answers to some criticisms put forward by Poulantzas. In any case, during Poulantzas life-time (Poulantzas died in 1979), is more a unilateral dialogue, made of direct borrowing of concepts (i.e. disciplinary techniques, normalization, panopticism, 'anatomo-politics', the recomposition of the body politic) – which is always at the same time a process of modification of these concepts themselves – and harsh criticisms (in particular directed against Foucault's underestimation of capitalist relation of production and class struggle as the state's real foundation and against his one-sided view

[129] Nicos Poulantzas, *State, Power, Socialism*, trans. by Patrick Camiller, Verso Books, London-New York 2000

[130] Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. by Alan Sheridan, Vintage Books, New York 2012

[131] Michel Foucault, *The History of Sexuality: An Introduction. Vol.* 1, trans. by Robert Hurley, Pantheon Books, New York 1978.

[132] Étienne Balibar, "Foucault and Marx: the Question of Nominalism", in Timothy J. Armstrong (ed. and trans.), *Michel Foucault, Philosopher*, Harvester Wheatsheaf, Hemel Hempstead 1992, pp. 38-55, p. 39.

[133] «In his lectures on *governmentality*, held shortly after the publication of SPS [*State, Power, Socialism*], Foucault used a particular phrase to characterize the state that was reminiscent of Poulantzas: "The state is nothing else but the mobile effect of a regime of multiple governmentalities"» (Urs L. Lindner, "State, Domination and Politics: On the Relationship between Poulantzas and Foucault", in Gallas *et al.* (eds.), *Reading Poulantzas* cit., pp. 138-153, p. 149).

[134] Michel Foucault, "Security, Territory, Population", in Michel Foucault, *Ethics: Subjectivity and Truth: Essential Works of Michel Foucault 1954-1984. Vol* 1, ed. by Paul Rabinow, trans. by Robert Hurley *et al.*, The New Press, New York 1997, pp. 67-71.

[135] Michel Foucault, "The Birth of Biopolitics", in Foucault, *Ethics: Subjectivity and Truth* cit., pp. 73-79.

of the law, centered only on its repressive and prohibiting side)[136]. Then there is the connection between Poulantzas and Althusser[137] and, finally, we can go back again to Foucault, through his silent dialogue with Althusser, which is acknowledged as the theoretical transmission belt in Foucault's critical discussion with Marx and the Marxisms, a «genuine struggle» that «can be viewed as one of the driving forces of his productiveness»[138].

It can be said that the three of them – Poulantzas, Foucault, Althusser –, despite their spelled out differences or their explicit move away from any comparison[139], share the same interest for the problematic of social reproduction which is, at the same time, the problematic of subject(ion) in the proper conditions of modernity. Also, this common need to which they give similar answers had been made urgent by common life experiences, such as the failure of May '68 and the consequent reorientation in their respective theoretical and political analyses.

Moreover, Foucault is, in various ways, directly integrated into the

[136] For a detailed account of the relation between Poulantzas and Foucault, focused on Poulantzas' direct references as well as on a more general theoretical convergence between the two see Bob Jessop, *State Theory: Putting the Capitalist State in its Place*, Penn State Press, University Park 1990, Chapter 8; Thomas Lemke, *Foucault's Analysis of Modern Governmentality*, trans. by Erik Butler, Verso Books, London-New York 2019, Chapter 5 and Lindner, "State, Domination and Politics" cit.

[137] See Alexander Gallas, "Revisiting Conjunctural Marxism: Althusser and Poulantzas on the State", in *Rethinking Marxism*, vol. 29, no. 2 (2017), pp. 256-280.

[138] Balibar, "Foucault and Marx" cit., p. 39.

[139] This is particularly true in the case of Althusser and Foucault. Foucault has always heavily criticized any use and interpretation of Althusser's concept of ideology, to the extent that this would enable a theory of the epistemological break between knowledge and science and the pretense to make Marxism a political metadiscourse. See, for example, Michel Foucault, "Truth and Power", in Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, ed. by Colin Gordon, trans. by Colin Gordon *et al.*, Pantheon Books, New York 1980, pp. 109-133. Moreover, Foucault rejected the comparison between the concept of material ideology and his notion of *dispositif*. However, there are undeniable deep similarities and theoretical continuity between the two concepts. For a convincing juxtaposition of ideology and *dispositif*, enriched by the support of new materials see Orazio Irrera, "L'idéologie et la préhistoire du dispositif", in *La pensée politique de Foucault*, ed. by Orazio Irrera and Salvo Vaccaro, Kimé, Paris 2017, pp. 137-155; Orazio Irrera, "Foucault and the Refusal of Ideology", in *Foucault and the Making of Subjects*, ed. by Laura Cremonesi *et al.*, Rowman & Littlefield, Lanham 2016, pp. 111-128; Diego Melegari, "Due fratelli silenziosi. Althusser, Foucault al bivio dell'ideologia", in *Scienza & Politica. Per una storia delle dottrine*, vol. 26, no. 50 (2014), pp. 137-159. In general, the link between Althusser and Foucault has only quite recently been considered, in addition to Balibar, "Foucault and Marx" cit., see also: Pierre Macherey, *Le sujet des normes*, Éditions Amsterdam, Paris 2014 and Warren Montag, ""The Soul is the Prison of the Body": Althusser and Foucault, 1970-1975", in *Yale French Studies*, no. 88 (1995), pp. 53-77.

HMPA and in the strategic-relational approach[140] framework, being one of its sources. In this light, Foucauldian arguments about power and knowledge, governmentality, statecraft, strategy, technology of power, are fundamental. Such integration is useful to detach this framework from class reductionism characterizing Poulantzas' reflection. Although in *State, Power, Socialism* he came to take notice of other relations of domination in CSC (especially the gender one[141]), which were completely ignored in his previous work, he has never managed to abandon the emphasis, so typical of traditional Marxism, on class domination. Consequently, in his theory, he does not do justice to the multiplicity of relations of domination in capitalist contexts such as sexuality, ethnicity, disability... and their *intersections*.

Now, we can go on discussing the concept of *dispositif*[142] and, then, its insertion-modification in the macro-logic of the CSC which is being proposed.

The notion of *dispositif* has been introduced in the philosophical lexicon by Foucault who, starting from the 1970s, begins to use this concept several times until it becomes the central element of the disciplinary systems' analysis he conducted in *Discipline and Punish* and then, increasingly, of the genealogy of sexuality in *The History of Sexuality*. In these texts, however, Foucault does not provide a general definition of the notion of *dispositif*; a more specific determination will be given by the philosopher in an interview published in 1977. And he will put this notion into motion and develop it more systematically in the aforementioned annual lectures given

[140] Jessop, *State Theory* cit.; Jessop, *State Power: a Strategic-Relational Approach* cit.; Ulrich Brand, "State, context and correspondence. Contours of a historical-materialist policy analysis", in *Österreichische Zeitschrift für Politikwissenschaft*, vol. 42, no. 4 (2013), pp. 425-442; Buckel, *Subjektivierung und Kohäsion* cit.; Buckel *et al.*, *The European Border Regime in Crisis* cit.; Alex Demirović, "Materialist State Theory and the Transnationalization of the Capitalist State", in *Antipode*, vol. 43, no. 1 (2011), pp. 38-59; John Kannankulam and Fabian Georgi, "Varieties of Capitalism or Varieties of Relationships of Forces? Outlines of a Historical Materialist Policy Analysis", in *Capital & Class*, vol. 38, no. 1 (2014), pp. 59-71; Buckel, "The Juridical Condensation of Relations of Forces" cit.

[141] See Jörg Nowak, "Poulantzas, Gender Relations and Feminist State Theory", in Gallas *et al.* (eds.), *Reading Poulantzas* cit., pp. 123-137.

[142] I maintain the French word and not the common English translation "apparatus" because of its crucial conceptual and etymological ties, which, instead, are occluded by "apparatus". An English preferable translation, also in accordance with the Italian translation "*dispositivo*", is the term "dispositive". For a detailed analysis of the conceptual differences between *appareil/apparato*/apparatus and *dispositif/dispositivo*/dispositive see Jeffrey Bussolini, "What is a Dispositive?", in *Foucault Studies*, no. 10 (2010), pp. 85-107.

at Collège de France in 1978 and 1979[143]. Although the concept of *dispositif* is acknowledged today as «one of the most powerful conceptual tools introduced by Foucualt»[144], as Paul Rabinow writes in the introduction to *The Essential Foucault*, still holds true what Rabinow himself wrote in his (and Hubert Dreyfus') 1982 seminal introduction to the work of Foucault about the *dispositif*: an extremely vague concept in terms of methodological rigor[145]. A vagueness that the philosophical criticism has tried to delimit by means of interpretation in the course of the years, starting from Deleuze. Deleuze's interpretation, exposing the basic features of the *dispositif* and its central status in Foucault's thinking, has been very influential in the reception of this concept[146]. In this vein, we will also start to unfold the notion of *dispositif* referring, alongside Foucault's words in the aforementioned 1977 conversation, to Deleuze's conference held in 1988 entitled *What is a* dispositif*?*[147].

Now, in that 1977 interview, invited to account for the «meaning» and the «methodological function» of the term, Foucault says:

> What I'm trying to pick out with this term is, firstly, a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid. Such are the elements of the *dispositif*. The *dispositif* itself is the *network* that can be established between these elements[148].

[143] For a reading of the *dispositif* employing the Collège de France lectures as a key point of departure see Sverre Raffnsøe *et al.*, *What is a Dispositive? Foucault's Historical Mappings of the Networks of Social Reality*, 2014, https://www.academia.edu/9838825/What_is_a_dispositive_Foucault_s_historical_mappings_of_the_networks_of_social_reality.

[144] Paul Rabinow and Nikolas S. Rose, "Foucault Today", in *The Essential Foucault: Selections from the Essential Works of Foucault: 1954-1984*, ed. by Paul Rabinow and Nikolas S. Rose, New Press, New York 2003, pp. vii-xxxv, p. xv.

[145] Hubert L. Dreyfus and Paul Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics*, The University of Chicago Press, Chicago 1982, pp. 119-121.

[146] Monique David-Ménard, "Agencements deleuziens, dispositifs foucaldiens", in *Rue Descartes*, no. 1 (2008), pp. 43-55.

[147] Gilles Deleuze, "What is a *dispositif*?", in Armstrong (ed.), *Michel Foucault, Philosopher* cit., pp. 159-168.

[148] Michel Foucault, "The Confession of the Flesh", in Foucault, *Power/Knowledge* cit., pp. 194-228, p. 194. English translation amended: in the original one finds the expression "system of relation" instead of "network", however "network" is more adherent to the french word "*réseau*", used by Foucault (Michel Foucault, "Le jeu de Michel Foucault", in *Ornicar. Bulletin périodique du champ freudien*, vol. 10 (1977), pp. 62-93. entretien avec D. Colas, A. Grosrichard, G. Le Gaufey, J. Livi, G. Miller, J. Miller, J.-A. Miller, C. Millot, G.

The conception of the *dispositif* as a net – which we must not imagine in any regular way, but more similar, it could be said, to the knotted fishing nets, or to a «tangle», to use Deleuze's words[149] – allows us to grasp two important features of this concept. First of all, its being "a name of variables", to use again a Deleuzian expression. This means that the term *dispositif* does not indicate something general and constant that is always and everywhere given in the same way, rather something unique, contingent – since historically determined – which is formed in a unique way from the intertwining of particular factors. It is for this reason that it would be better to speak of *dispositifs*, in the plural. Foucault's anti-essentialist and nominalist vision emerges clearly here, as well as the eminently historical, archaeological-genealogical character of his analysis of *dispositifs*. The *dispositif* is a deeply relational concept: it is simultaneously a set of heterogeneous elements, situated within an arrangement, as well as the set of their connections. Deleuze elucidates the dimensions, the lines along which these connections run, i.e. the three dimensions of the *dispositifs*: knowledge[150], power, subject(ivation). This is in accordance with what Foucault himself will write in the second volume of *The History of Sexuality* in 1984 where he defines the notion of "form of experience" – which is a concept linked to *dispositif* – as «a correlation between fields of knowledge, types of normativity, and forms of subjectivity»[152]. In what follows these three dimensions have been maintained as a key to reading the notion of *dispositif*. Only to justify this claim, therefore, it is made reference to some conceptual archaeologies of the term, without entering the diatribe on which is the "true" one.

The second feature evoked by the image of the net is that of capture, a feature on which Agamben's interpretation particularly insists:

> I shall call a *dispositif* literally anything that has in some way the capacity to

Wajeman) as well as its Italian translation "*rete*" (Michel Foucault, "Il gioco", trans. by Ettore Perrella, in *Millepiani*, vol. 2 (1994), pp. 23-51). Moreover, in accordance with what has been stated before, the word "apparatus", which is the original English translation, has been substituted with "*dispositif*".

[149] Deleuze, "What is a *dispositif*?" cit., p. 159.

[150] To be more precise, Deleuze splits the first line (knowledge) in two: curves of visibility and curves of enunciation, which «make one see and speak»[151]. These lines define the space of that which can be seen and enunciated, in the field of a given *dispositif*.

[152] Michel Foucault, *The History of Sexuality, Vol. 2: The Use of Pleasure*, trans. by Robert Hurley, Random House, New York 1985, p. 4.

> capture, orient, determine, intercept, model, control, or secure the gestures, behaviors, opinions or discourses of living beings[153].

If, therefore, it is true that living beings are constantly caught in the meshes of the *dispositifs* – which are «meshes of power»[154] – then an important consequence is that the *dispositifs* can be conceived neither as tools *at the disposal* of someone nor as tools *made by* someone, two aspects that mutually imply each other.

Let's look at the first part of the negative disjunction. The *dispositifs* are not at the disposal of anyone: there are no absolute sovereigns or central authorities to govern them because they themselves arrange (the Latin word for the verb "arrange" is *disponere*, from which comes the French word *dipositif*) the relations of power. They allow knowledges, powers and subjectivations, to performatively come into being.

Following, in the first instance, the interpretation proposed by Agamben about the genealogy of the term *dispositif* in Foucault's thinking and, then, the genealogy proposed by Judith Revel, one of the main scholars of Foucault, we can deepen what has been said. Agamben claims that this term replaced in the 1970s the term *positivité*, "positivity", used by the French philosopher at the end of the 1960s trying to get a similar problematic and borrowed – with the mediation of Foucault's "master" Jean Hyppolite (as Foucault himself at times calls him) – from the young Hegel. In the essay *Introduction to Hegel's Philosophy of History*[155], Hyppolite analyzes Hegel's work *The Positivity of the Christian Religion* of 1795-96, where the German philosopher speaks of the opposition between "positive religion", institutionalized and historical, and "natural religion", focused on the direct relationship between human reason and God. While the latter is immediate, the former, instead, has to do, says Hegel in a passage quoted by Hyppolite, with «feelings that are more or less impressed through

[153] Giorgio Agamben, "What Is an Apparatus?", in *"What Is an Apparatus?" and Other Essays*, trans. by David Kishik and Stefan Pedatella, Stanford University Press, Stanford 2009, pp. 1-24, p. 14. [amended translation]

[154] The reference is to the title of Foucault's lecture on his conception of the notion of power given at the University of Bahia, Brazil, on November 1, 1976, first appeared in English as Michel Foucault, "The Meshes of Power", in *Space, Knowledge and Power: Foucault and Geography*, ed. by Stuart Elden and Jeremy W. Crampton, trans. by Gerald Moore, Ashgate Publishing Company, Burlington 2007, pp. 165-174.

[155] Jean Hyppolite, *Introduction to Hegel's Philosophy of History*, trans. by Bond Harris and Jacqueline Bouchard Spurlock, University Press of Florida, Gainesville 1996.

constraint on soul»[156]. This constraint on the subject – and this is important for the link between positivity and *dispositif* –, is not only an external relation of command and obedience through rites and rules but, above all, through acts from within on the individual, positing, i.e. "positivizing", feelings, behaviors, forms of perception and self-awareness. Therefore, according to Agamben, both the historical element and the issue of the relations between living beings and processes of subjectivation and the typical Foucauldian "productive" account of power, held in tension by institutions and rules, are condensed in the concept of positivity.

Following the line of the processes of subjectivation and referring back to Agamben's quotation we see that the *dispositifs* orient rationalization and behavioral models, constituting individuals into subjects, thus shaping specific social interplays. Thus:

> at this stage, the social actions must be analyzed as events that occur with regards to and with an effect on the dispositive. [. . .] The dispositive is an inclusive depiction of whatever seems to have been prescribed or determined as applicable to the social interplay at any given time. [. . .] this normative level is regarded as an inevitable 'reality', in so far as the dispositive influences the (in their own right already prescriptive) activities of the sociality. The effects of the dispositive are embedded in the institutions it reshapes[157].

The Agambenian etymological and genealogical reconstruction, however, does not seem to deepen directly the other dimension of the *dispositifs* in addition to powers and subjectivations, that is, knowledge. This point can thus be integrated by using Revel's analysis[158]. Revel identifies the conceptual antecedent of the notion of *dispositif* in the term "*épistémè*", or "epistemological field"[159], keywords of *The Order of Things*[160] of 1966. This link is also explicitly stated by Foucault himself in the 1977 interview:

[156] *ibid.*, p. 21.
[157] Raffnsøe *et al.*, *What is a Dispositive?* cit., pp. 19-20.
[158] See Judith Revel, *Dictionnaire Foucault*, Ellipses, Paris 2008, pp. 41-42.
[159] Another interpretation in accordance with Revel's reading is Óscar Moro Abadía, "¿Qué es un dispositivo?", in *Empiria: revista de metodología de Ciencias Sociales*, no. 6 (2003), pp. 29-46.
[160] Michel Foucault, *The Order of Things. An Archaeology of the Human Sciences*, trans. by Alan Sheridan Smith, Routledge, London 2005.

> What I should like to do now is to try and show that what I call an apparatus is a much more general case of the *episteme*; or rather, that the *episteme* is a specifically discursive apparatus, whereas the apparatus in its general form is both discursive and non-discursive, its elements being much more heterogeneous[161].

For Foucault, an epistemological field is the «historical *a priori*» and the element of «positivity» by virtue of which «ideas could appear, sciences be established, experience be reflected in philosophies, rationalities be formed, only, perhaps, to dissolve and vanish soon afterward»[162]. An epistemological field is *a priori* in that it is a system of the conditions of possibility of the different types of discourse *and* it is historical in that it is historically determined. Talking in terms of epistemological field allows, on the one hand, to spatialize history and on the other hand to identify the constitutive and performative character of the *a priori*. The notion of field – of historical *a priori* – develops in the more complex one of network, thus implementing the transition to the concept of *dispositif*[163], once the one-sided vision on the sphere of discourse is abandoned and that greater variety of constitutive factors of which it was said above is taken into account. The replacement of the term "*épistémè*" with *dispositif*. therefore, leads the analysis beyond the boundaries of that which can be enunciated in an era, its fields of science, in the direction of the investigation of «everything which functions in a society as a system of constraint and which isn't an utterance»[164] which is how Foucault defines the term "institution". In so doing, the analysis is pushed toward an investigation of materiality, of balances of forces, of power games thus impressing on the "philosophy of *dispositifs*", as Deleuze calls it, a political torsion, more than an epistemological one.

Now, let's go back to discuss the second part of the negative disjunction. The *dispositifs*, we have said, are not made by anyone, but they are made impersonally, without a subject. "And what?", one could argue, "laws are not enacted by the state? Administrative measures are not decided by competent bodies? Architectural structures are not designed and built by professionals?". To counter this objection, we must first answer another

[161] Foucault, "The Confession of the Flesh" cit., p. 197.
[162] Foucault, *The Order of Things. An Archaeology of the Human Sciences* cit., p. XXIII.
[163] See Judith Revel, *Le vocabulaire de Foucault*, Ellipses, Paris 2009, pp. 24-27.
[164] Foucault, "The Confession of the Flesh" cit., pp. 197-198.

question, which has been left out so far, but which is of the utmost importance: what is the origin of the *dispositifs*? Foucault, again in the 1977 interview, states:

> I understand by the term '*dispositif*' a sort of – shall we say – formation which has as its major function at a given historical moment that of responding to an urgent need. The apparatus thus has a dominant strategic function[165]

Response to an urgency: a criterion of genesis which, together with the structure of heterogeneous constituent elements, best defines what is a *dispositif*, fixing its «*strategic* nature»[166]. In the wide heterogeneity and flexibility of the *dispositif*, the French philosopher introduces, therefore, as a unitary principle the rule of their appearance. This urgency qualifies as a problem, a mostly pragmatic need, the resolution of which is a strategic objective to be achieved. It is precisely the search for the urgency, the thrusts, and dynamics that originated the *dispositifs* of modernity, first of all, the prison, to absorb the analytical energies of Foucault in the 1970s. For example, we find this perspective from the very first pages of *Discipline and Punish*. Thus, the reduction in penal severity, with the passage from torture to prison, is not so much a decrease in intensity (a quantitative phenomenon) as, Foucault says, «certainly a change of objective»[167]. It is not so much a transformation of attitude as «an effort to adjust the mechanisms of power that frame the everyday lives of individuals; an adaptation and a refinement of the machinery»[168] according to changing social, economic and cultural situations, such as the shift from rights violations to goods violations. Or again, we can cite the example that the French philosopher gives in the interview concerning the practical problem that a floating, wandering population causes at the dawn of mercantilist society. The strategic objective is, in this situation, to avoid the mobility of labor, so that «one finds the local and perfectly explicit appearance of definite strategies for fixing the workers in the first heavy industries at their work-places»[169] including the building of working-class cities, providing housing, the establishment of savings-banks system, the discourse of philanthropy...

[165] *ibid.*, p. 195. [translation emended]
[166] *ibid.*, p. 196.
[167] Foucault, *Discipline and Punish* cit., p. 16.
[168] *ibid.*, p. 77.
[169] Foucault, "The Confession of the Flesh" cit., p. 202.

Now, talking about strategies seems to complicate further explaining their impersonality, their being anonymous and without a subject. Indeed talking about objectives and strategies immediately evokes the idea of the agent subject who pursues the former and realizes the latter, nonetheless, for Foucault, the strategies are without strategists and the objectives without someone imposing them. This is true at a macro-level, at the network level, not at the level of the single component elements; it is no coincidence, in fact, that Foucault speaks of «grand strategies», or «global strategy». The French philosopher, obviously, does not maintain, to say, that the project of this building is not the work of such an architect, or that the obligation of schooling is not a decision taken by Parliament, but that at network level there is no need to «attribute to it a subject which makes the law, pronouncing it in the form of 'Thou shalt' and 'Thou shalt not'»[170]. To return to the example of the mobility of employment, the moralization of the working class through philanthropic discourse has not been imposed by anyone: not by Guizot's legislation nor by Dupin's books, nor by the masters' unions. «And yet», Foucault states, «it was accomplished, because it met the urgent need to master a vagabond, floating labour force»[171]. Through contextualized interaction, re-adjustment, re-working, modification, over-determination of the practices, singular objectives and tactics, then «you get a coherent, rational strategy, but one for which it is no longer possible to identify a person who conceived it»[172].

The insistence on the concept of globality, of coherence, refers to, and supports, an extremely neat, concatenated and balanced vision of things, in which everything appears perfectly calculated, which can give the impression of being too pretty to be true and of having forgotten about the «shambles»[173]. Partly this impression is legitimate, and it is due to the point of view on the problems that Foucault adopts. He, in fact, is not interested

[170] *ibid.*, p. 204.
[171] *ibid*.
[172] Foucault, "The Confession of the Flesh" cit. p. 203. See also what Foucault writes about "general apparatuses" ("*dispositifs d'ensemble*") in *The History of Sexuality: The Will to Knowledge*: «here the logic is perfectly clear, the aims decipherable, yet it turns out that no one can have conceived and very few formulated them: such is the implicit character of the great, anonymous, almost mute strategies which coordinate the voluble tactics whose "inventors" or directors are often devoid of all hypocrisy» Foucault, *The History of Sexuality: An Introduction. Vol.* 1 cit., p. 95.
[173] Foucault, "The Confession of the Flesh" cit., p. 209.

in the mere description of a phenomenon, but wonders «Why did that work? How did that hold up?»[174]; he starts, therefore, from the fact that such a thing has succeeded, as if following a "battle", and he wonders the reasons for it. To start from something that worked and held up, and to explain it, implies an ordered vision, while to describe the battle does not. Even if one holds, however, that Foucault's analyses are "too well done", charging him with *functionalism*, one cannot fail to recognize the awareness of the unpredictability of the effects that the *dispositifs* induce. A *dispositif*, despite admitting a certain reorganization of the heterogeneous elements, as a result of the interaction and contradiction of its effects, positive or negative, is not able to fully predict the system of its effects. Thus, for example, the prison does achieve the strategic objective of monitoring, concentrating, and filtering the mobility of a multitude of vagrants and irregulars but, at the same time, produces an involuntary effect absolutely unforeseen at the beginning: the formation of a professional delinquent milieu. This effect can then be taken up in a new strategy, for which it has acted as a driving force, as an urgency, for example the organization of prostitution. In the end, Foucault defines the *dispositif* as:

> a matter of a certain manipulation of relations of forces, either developing them in a particular direction, blocking them, stabilising them, utilising them, etc. The apparatus is thus always inscribed in a play of power, but it is also always linked to certain coordinates of knowledge which issue from it but, to an equal degree, condition it. This is what the apparatus consists in: strategies of relations of forces supporting, and supported by, types of knowledge[175].

In other words, the idea of grand strategies designates «the specific character of the social by viewing its regularisation as a result of the unification and homogenisation of individual patterns of action, which is induced by their concurrence»[176]. Now, the Foucauldian conception presents some problematic issues: after all, there is still certain latent functionalism, (actually, Foucauldian explanations are *ex post* functionalist) especially in the idea of the genesis of the *dispositifs* as a response to an

[174] *ibid*.
[175] Foucault, "The Confession of the Flesh" cit., p. 196.
[176] Gallas, *Dichotomy, Dualism, Duality* cit., p. 78.

urgency. Secondly, we face a scale problem. Not only the level of practical social analysis calls for a discrimination as to when to speak of a *dispositif* at all but also concerning the types and numbers of *dispositif* to be used. What does it mean, for example, to talk about the "*dispositif* of the Athenian city", or the "Christian *dispositif*", or "the *dispositif* of the French Revolution or the Bolshevik Revolution", as Deleuze does?[177]. Finally, the concept of *dispositif* as grand strategies leaves open how the aforementioned regularization of patterns of action is achieved. Why they tend to converge and which is their point of convergence?

To sum up, it is possible to say that, adopting a charitable interpretation of the Foucauldian dictum, there is the idea of an overall unity of a system of domination through a certain strategic codification of the power relations. Nevertheless, since such idea does not have any theoretical hooks that could explain why and how a certain strategic codification takes place (for example, Poulantzas' concept of "structural selectivities" and Bob Jessop's adaptation as "strategic selectivities"), it succumbs in fact in favor of the only discourse of the micro-power: the ever-changing and mutual composition, breaking up, contrasting of the relations of power, their «sociological amorphy»[178]. Otherwise stated, if the *dispositif* is a network made up of lines (of power, of subjectivation, of knowledge) that run between heterogeneous elements establishing relations between them, this same network of relations, far from offering itself to the evidence of sensory experience, can emerge only through a theory capable of analyzing the abstractions that constitutively and always specifically structure the social field. And social *formanalysis* is precisely a theory able to analyze those concrete abstractions that are social forms. Therefore, it is claimed that it is possible to overcome the problems related to the Foucauldian use of the concept of *dispositif* through a process of insertion-modification in the macro-logic which is being outlined. Thus, for this purpose, we can define it as follows:

> *A* dispositif *is a network of institutions and mixed practices, authorized by correlated scientific knowledges, with subjectivation effects.*

Since the term "institutions" is somewhat vague both in ordinary

[177] See Deleuze, "What is a *dispositif*?" cit.
[178] Jessop, *State Theory* cit., p. 238.

language and in the sociological and philosophical literature, it is useful to make it clearer. Following the Stanford Encyclopedia of Philosophy's entry for "social institutions"[179], institutions need to be distinguished from less complex social elements such as conventions, rules, roles, rituals. The latter are among their constitutive components. At the same time, institutions need to be distinguished from more complex social entities (such as societies and cultures), of which any given institution is distinctively a constitutive element. Social institutions are often organizations and they can also be systems of organizations, grounded in different spheres of activity (political, economic, etc.). Moreover, some institutions are meta-institutions, i.e. institutions (organizations) organizing other institutions (including systems of organizations), for example, governments are meta-institutions. In a *dispositif* we can find institutions of all these three kinds. Each *dispositif*, thus, can be seen as analogous to a molecule; it would have constitutive elements ("atoms") but also its own structure and unity. Further, this conception allows us to account both for the relative independence of a *dispositif* vis-à-vis other *dispositifs* and the social complex at large and for their being part, under certain condition, of a unitary system of sorts (settled by the social forms).

Regarding the relation between social forms and *dispositifs* we can see social forms as matrices of *dispositifs* and, in turn, *dispositifs* as concretization, materialization of social forms. The forms determine the conditions of possibility for the constitution of *dispositifs* and orient the set of practices, institutions, and knwoledges in a given reticular layout. Moreover, at the most abstract level of analysis, the social forms also shape the reasons why the *dispositifs* are arranged in certain ways and not in others.

Now, let's examine what this introduction-modification implies with respect to the three dimensions of knowledges, subjects, and power. Looking at the knowledges, we can say that the social forms constitute the epistemic immediate objects of the knowledges correlated to institutions and practices. We have seen above that social forms constitute the categories of the fields of knowledge – the concepts – claiming to detect social relations instead of those reified social relations themselves. For example, economic forms like value or capital constitute what individual economists perceive as a matter

[179] See Miller, "Social Institutions" cit.

of course to be the obvious object of political economy. Generally, these knowledges never discuss the social forms in themselves (at most they discuss their naturalization), the *form-determinations* of their subject matter, rather they solely focus on their concrete content, namely the practices and institutions that are being constituted within this layout. Therefore, we have pre-formed knowledges which, in turn, socially validate – by organizing and authorizing certain *dispositifs* – the corresponding forms. This link between social forms and knowledges shows that the social *formanalysis* is not an abstract exercise, rather it is an essential moment for a theory of society capable of challenging not only certain knowledges but also the social relations underlying them.

Speaking about the issue of subjectivity, we have seen that social forms outline the "system-limits" of capitalist subjectivity: they determine basic specific conditions of possibility for actions and rationalization of individuals. Recall the example of the individuals constituted as wage laborers by the economic forms. At the level of the *dispositifs*, where we deal with concrete and historical institutional constellations and processes, we reach a further delineation of the subjectivity. For example, consider the neoliberal *dispositif*, whose elements are – among others – legal-political practices that reduce workers' rights and political-economic practices that liberalize exchange. Here, with regard to the field of action of this *dispositif*, the wage laborer is further constituted by such meshes of power as a precarious worker.

Finally, power. The kind of power relationality at the level of the *dispositif* is a conflicting, polemical one. Here we find tactics, objectives, strategies, projects, interests of different social agents confronting each other, i.e. the field of struggles between social forces. It is at this stage in the analysis – the same adopted by Marx in *The Eighteenth Brumaire* – that is meaningful to talk about the different class compositions, class identity, political parties, dynamics of political representation, social movements, public assemblies, mass gatherings, informal groups and so on.

Such conflicting relationality always takes place in the context of the *dipositifs*, crossing, traverses them and, this way, its trajectories are influenced both by the *dispositifs* and – in a more structural sense – by the social forms. We have seen above that the social forms themselves are bearers

of power relations: they realize that indirect and impersonal domination characteristic of CSC. Therefore, within this macro-logic which integrates the discourse of the *dispositifs* with that of the social forms, two types of power relationality can be distinguished: the dimension of collective conflict which goes through the *dispositifs* and the relationality of "domination" which refers to the relatively permanent social bond determined by the social forms. Thus, the notion of power alone is not sufficient to grasp these two different types of relationality. For this reason, it is suggested here to introduce the concept of "politics" to define the conflicting one, which covers both dominant strategies and the antagonist ones and also the "grey zones" between the two. This use of the notion of "politics" is partly inspired by Rancière's conception.

According to Rancière, the mainstream conception of politics, which sees it in terms of elections, bureaucracies, shifting of power relations in the state, decisions of courts, the government of the population with respect to its security and health, etc., is not politics at all: it is instead what he calls *the police*. To use his own words:

> Politics is generally seen as the set of procedures whereby the aggregation and consent of collectivities is achieved, the organization of powers, the distribution of places and roles, and the systems for legitimizing this distribution. I propose to give this system of distribution and legitimization another name. I propose to call it *the police*[180].

This linguistic choice intends to explicitly resonate not only with the coercion and repression often associated to «the petty police, the truncheon blows of the forces of law and order and the inquisitions of the secret police»[181] but also, and more substantially, with that concept of police – identified by Foucault in the works of writers of the eighteenth century – as practices of government that are oriented to cover everything relating to population and its happiness. The process of policy, as Rancière defines it, «is that of governing, and it entails creating community consent, which relies on the distribution of shares and the hierarchy of places and functions»[182].

[180] Jacques Rancière, *Disagreement: Politics and Philosophy*, trans. by Julie Rose, University of Minnesota Press, Minneapolis 1999, p. 28.
[181] *ibid.*, p. 28.
[182] Jacques Rancière, "Politics, Identification, and Subjectivization", in *October*, vol. 61 (1992), pp. 58-64, p. 58.

This distribution is a complete one «that leaves no space for a supplement»[183] because it allocates «ways of doing, ways of being, and ways of saying»[184], i.e. it engenders an order of the visible and the sayable within which «bodies are assigned by name to a particular place and task»[185].

This is the «normal order of things», the fact «that human communities gather together under the rule of those qualified to rule - whose qualifications are legitimized by the very fact that they are ruling»[186]. In Rancière's conception, politics stands in plain opposition to police, implementing a logic completely heterogeneous to that of the police:

> I now propose to reserve the term *politics* for an extremely determined activity antagonistic to policing: whatever breaks with the tangible configuration whereby parties and parts or lack of them are defined by a presupposition that, by definition, has no place in that configuration – that of the part that has no part. This break is manifest in a series of actions that reconfigure the space where parties, parts, or lack of parts have been defined. Political activity is whatever shifts a body from the place assigned to it or changes a place's destination[187].

Politics is a «rupture», a «deviation», «a supplement to all social (ac)counts and an exception to all logics of domination»[188], i.e. the hierarchical logic of the police. Its process, in fact, «is that of equality. It consists of a set of practices guided by the supposition that everyone is equal and by the attempt to verify this supposition. The proper name for this set of practices remains *emancipation*»[189]. The form of this process is that of dissensus, a quarrel over a social order's given assumptions, over the naturalness of police order, over the order of the visible and sayable which allocates the places where one does one thing and those where one does something else, «enacted in the name of a category denied either the principle or the consequences of that equality: workers, women, people of

[183] Jacques Rancière, "Introducing Disagreement", in *Angelaki: Journal of the Theoretical Humanities*, vol. 9, no. 3 (2004), pp. 3-9, p. 6.
[184] Rancière, *Disagreement* cit., p. 29.
[185] *ibid*.
[186] Jacques Rancière, "Ten Theses on Politics", trans. by Rachel Bowlby and Davide Panagia, in *Theory & event*, vol. 5, no. 3 (2001).
[187] Rancière, *Disagreement* cit., pp. 29-30.
[188] Rancière, "Ten Theses on Politics" cit.
[189] Rancière, "Politics, Identification, and Subjectivization" cit., p. 58.

color, or others»[190]. This name, however, is not the "right" one: «names that pin people down to their place and work»[191], which pertain to police and its identity logic. «Politics – says Rancière – is about "wrong" names»[192], «it is never the simple assertion of an identity; it is always, at the same time, the denial of an identity given by an other, given by the ruling order of policy»[193]. These truly political subjects are «always on the verge of disappearing, either through simply fading away or, more often than not, through their re-incorporation, their identification with social groups or imaginary bodies»[194]. This is how consensus works:

> Consensus knows only: real parts of the community, problems around the redistribution of powers and wealth among these parts, expert calculations over the possible forms of such redistribution, and negotiations between the representatives of these various parts[195].

«Consensus, then, – Rancière concludes – is actually the modern form of reducing politics to the police»[196]. So, politics is not at all a permanent given of human societies, rather it is a precarious, contingent, quasi-exceptional activity.

As previously said, the dimension of politics is intended here in a broader sense than Rancière's demanding conception. This sense is perhaps more similar to Rancière's notion of the political: «the encounter between two heterogeneous processes»[197], «the field for the encounter between emancipation and policy in the handling of a wrong»[198]. The problem here is that it has been questioned, both on the basis of a contextual argument concerning Rancière texts and on a content basis, that this notion plays any significant role in Rancière's whole reflection. Chambers[199] points out that the distinction between the political and politics is not introduced by Rancière in his better-known French texts, but in one

[190] *ibid.*, p. 59.
[191] *ibid.*, p. 62.
[192] *ibid.*
[193] *ibid.*
[194] Rancière, "Introducing Disagreement" cit., p. 7.
[195] *ibid.*
[196] *ibid.*
[197] Rancière, "Politics, Identification, and Subjectivization" cit., p. 58.
[198] *ibid.*, p. 59.
[199] See Samuel A. Chambers, "Jacques Rancière and the Problem of Pure Politics", in *European Journal of Political Theory*, vol. 10, no. 3 (2011), pp. 303-326.

or two lectures Rancière wrote originally in English, in particular, 1991 paper *Politics, Identification, Subjectivization* presented at a conference in the United States. «Thus – Chamber states – the very idea of thinking about 'the political' comes to Rancière from outside, from what was at the time a very American-centric debate over multiculturalism, and it is voiced in a foreign language, English»[200]. Moreover, the whole Rancièrian intellectual production from the 1990s – thus after that 1991 conference in English, including his masterpiece on political thinking *Disagreement* (1995) – never deals nor bothers to develop that terminology and that distinction.

Relying on this argument, the claim of a "three terms" model – a realm of domination (police), a realm of dissensus (politics), and a ground upon which they meet (the political) – as hermeneutic key to Rancière's broad corpus on politics put forward by Jean-Philippe Deranty and, following him, by others[201] does not seem to be sustainable.

Nevertheless, it is possible to argue that if one abandons an ontological interpretation of the political, as a mediating third space that would allow the meeting of politics and police (which would still be an Arendtian-style introduction of a space "proper" to politics), and instead understand it in reference to the dynamics, to the relationship between politics and police (as a relational concept), one can give an interpretation adherent to Rancière's thought in its whole. For Rancière, in fact, there is no relationship of externality between politics and police:

> We should not forget either that if politics implements a logic entirely heterogenous to that of the police, it is always bound up with the latter.
>
> Politics acts on the police. It acts in the places and with the words that are common to both, even if it means reshaping those places and changing the status of those words. What is usually posited as the space of politics, meaning the set of state institutions, is precisely not a homogenous place. Its configuration is determined by the state of relations between political logic and police logic[202].

And again:

[200] *ibid.*, p. 314.
[201] See Jean-Philippe Deranty, "Rancière and Contemporary Political Ontology", in *Theory & Event*, vol. 6, no. 4 (2003) and Joseph J. Tanke, *Jacques Rancière: an Introduction*, Continuum Books, New York 2011.
[202] Rancière, *Disagreement* cit., p. 31, 33.

> Politics does not stem from a place outside of the police [. . .] There is no place outside of the police. But there are conflicting ways of doing with the "places" that it allocates: of relocating, reshaping, or redoubling them[203].

Thus, if we consider the political precisely as these «conflicting ways», as «the state of relation between political logic and police logic» we get the idea of the politics that we have introduced above, where it is possible to find also a Poulantzasian and *Eighteenth Brumaire* flavor.

There is another essential aspect of Rancière's conceptualization of politics that makes the reference to it particularly meaningful in the framework of the macro-logic here proposed and which is preserved in my concept of politics. Namely the clear refusal of the assumption that «"everything is political" since power relationships are everywhere»[204]. Otherwise stated, it is not the case that every social practice is in itself political. Rather, this approach assumes a logic of politicization in which the singular individuals are put together as collective actors. Rancière repeatedly gives the example of feminist movements. He says:

> The domestic household has been turned into a political space not through the simple fact that power relationships are at work in it but because it was the subject of argument in a dispute over the capacity of women in the community[205].

This is to say that «the home and housework are no more political in themselves than the street, the factory, or government», they are political inasmuch that the feminist movement «asks if [. . .] maternity, for example, is a private or a social matter, if this social function is a public function or not, if this public function implies a political capacity»[206]. The feminist movements interrupt, struggle with the police order of the sayable and visible by calling its social/political, private/public divide into question and create a stage for previously uncounted objects and subjects. They do this thanks to a process of political subjectification, as Rancière calls

[203] Jacques Rancière, "The Thinking of Dissensus: Politics and Aesthetics", in Paul Bowman and Richard Stamp (eds.), *Reading Rancière: Critical Dissensus*, Continuum Books, London 2011, pp. 1-17, p. 6.
[204] Rancière, *Disagreement* cit., p. 32.
[205] *ibid.*, pp. 32-33.
[206] *ibid.*, pp. 41, 40.

it, thanks to an assumption of the "wrong" name[207], which is broadly speaking a process of collective politicization. The difference here with my larger concept of politics is that for Rancière when a political subject is re-incorporated in the police order as a real part of the society (or as a party inside the logic of consensus) it immediately disappears as political subject as such[208].

Another source of inspiration for the *dispositif-politics* dimension of our macro-logic is HMPA approach, especially as elaborated in the article *The European Border Regime in Crisis*[209]. What here we are calling the conflicting relationality that traverses *dispositifs* is theorized within this framework using mainly the concept of hegemony project (that could be seen as quite similar to the Rancierian concept of police), based on the insights of Gramsci's hegemony theory, then articulated in a sophisticated and detailed approach. Hegemony projects are defined as «bundle of strategies that pursue similar goals»[210], implemented by a constellation (neither static nor homogeneous within it) of social actors in response to a problematic situation (a social, economic, political conflict or controversy) which aim at becoming hegemonic in «*society as a whole*»[211] (with reference to that conflict). However, as the authors underline: «not all social forces, not all actions, practices and strategies can conceptually be subsumed within hegemony projects»[212]. Thus they classify these other non-hegemony-

[207] «A mode of subjectification does not create subjects ex nihilo; it creates them by transforming identities defined in the natural order of the allocation of functions and places into instances of experience of a dispute. "Workers" or "women" are identities that apparently hold no mystery. Anyone can tell *who* is meant. But political subjectification forces them out of such obviousness by questioning the relationship between a *who* and a *what* in the apparent redundancy of the positing of an existence. In politics "woman" is the subject of experience-the denatured, defeminized subject-that measures the gap between an acknowledged part (that of sexual complementarity) and a having no part [. . .] All political subjectification is the manifestation of a gap of this kind. The familiar police logic that decides that [. . .] militant feminists are strangers to their sex, is, all in all, justified. Any subjectification is a disidentification, removal from the naturalness of a place» (*ibid.*, p. 36).

[208] For a critique of Rancière's thesis of reserving the term politics for emancipatory action from the point of view of its implausibility in light of the realities of our political world see Oliver Marchart, "The Second Return of the Political: Democracy and the Syllogism of Equality", in Bowman *et al.* (eds.), *Reading Rancière: Critical Dissensus* cit., pp. 129-147.

[209] Buckel *et al.*, *The European Border Regime in Crisis* cit.

[210] *ibid.*, p. 17.

[211] *ibid.*

[212] Buckel *et al.*, *The European Border Regime in Crisis* cit., p. 19.

oriented practices in reaction and refusal of a given hegemonic order as follows:

1. Counter-Hegemonic Strategies: strategies devoted to achieving an alternative hegemony in society. For example radical reformist projects, as well as conservative and progressive ones;
2. Anti-Hegemonic Strategies: strategies that reject hegemony, with its hierarchical relationships, as such. For example, radical critical, anarchist strategies which try to establish alternative space and way of life (communes, social centers, exchange rings, etc.);
3. Escape Strategies: non-political targeted everyday practices of subversion, resistance, refusal, avoidance of a hegemonic order. For example, migrant practices of mobility;
4. Resignation: non-strategic passive behaviors without any active participation in supporting a given hegemonic order which, however, act to stabilize it.

Except for the last category, the concept of politics here introduced also covers the other three types of strategies, insofar as they require a collective politicization (that could be seen as similar to the Rancierian concept of politics, antagonist to the police world). They, indeed, powerfully act on the social forces and their hegemony projects forcing them to react and reorganize themselves.

In order to empirically analyze conflicts, HMPA approach has set out a very refined method organized in three main steps[213]:

1. Context Analysis: its goal is to articulate both the historical dynamics (conjunctural contextualization) and the structural condition (form-determined and *dispositif* path dependency) of the investigated conflict, as well as of the different strategic response to it;
2. Actor Analysis: aim at identifying how and why social forces reacted differently and in an opposing way to the problematic situation. It involves: the analysis of strategies and their protagonists, the hegemony projects

[213] See Kannankulam and Georgi, "Varieties of Capitalism or Varieties of Relationships of Forces?" cit.

(previously outlined aggregating strategies into different projects) analysis, the analysis of the relative position of the hegemony projects within the social relations of forces for the conflict under consideration;

3. Process Analysis: the reconstruction of the dynamics of the conflict, the complex processes of the struggle of a conflict, thanks to the combination of the first two steps.

Thanks to the distinction between politics with reference to *dispositifs* and impersonal domination with reference to social forms it is possible to overcome the short circuit between these two kinds of power relationality made by Foucault in his definition of the notion of power, which is often evasive and indefinite. In this perspective, also the distinction explicitly outlined[214] by the late Foucault, and often used in the literature, between power relations and states of domination is inefficient. Foucault defines power relations as reversible at any time and as exercising «only over free subjects, and only insofar as they are "free"»[215] and states of domination as situations in which power relations «remain blocked, frozen»[216]. However, in CSC we have a juridical subjectivity based on freedom and equality, thus the Foucauldian distinction cannot have any analytical grip in this context.

This last observation indicates a further problematic point, connected to Foucauldian equivocal conception of power. In his critique of Freudo-Marxism and Lacanian psychoanalysis and the philosophies of the sovereignty of Hobbes, Rousseau, and Schmitt, Foucault constructs the *legal-discursive model of power* as an ideal-type of *negative* understanding of domination, centered on bans, prohibitions, and repression, while adopting, rather uncritically, the reductive vision of law – the model of command – which is an integral part of these theoretical perspectives. This does not allow him to grasp the distinctive features – freedom and equality – of legal subjectivity in the CSC, nor, therefore, the *productive*, positive character of modern law in the constitution of individuals as subjects and, in general, in securing

[214] «The analyses I am trying to make bear essentially on relations of power. By this I mean something different from states of domination» (Michel Foucault, "The Ethics of the Concern for Self as a Practice of Freedom", in Foucault, *Ethics: Subjectivity and Truth* cit., pp. 281-302, p. 283).
[215] Michel Foucault, "The Subject and Power", in *Power: The Essential Works of Michel Foucault 1954-1984. Vol 3*, ed. by James D. Faubion, trans. by Robert Hurley *et al.*, New Press, New York 2001, pp. 326-348, p. 342.
[216] Foucault, "The Ethics of the Concern for Self as a Practice of Freedom" cit., p. 283.

compliance[217].

We have said that social forms are matrices of *dispositifs* and, in turn, *dispositifs* as concretization, materialization of social forms. At a first glance, this could appear as a "form reductionist" statement. However, this is not the case. Between social form and *dispositifs*, indeed, there is not an essence/appearance relation, let alone a functionalist or a teleological one, in the sense that the social forms would necessarily lead to the constitution of specific *dispositifs* which would automatically ensure the social reproduction. It is true that the *dispositifs* are generally form-determined but there are multifarious ways – historical/concrete context-sensitive ways – in which this form determination occurs. Thus, forms are not fixed once and for all, neither they will always be materialized in a specific configuration.

For instance, the value form can be materialized in very different *dispositifs* involving money and credit. Consider money as the mesh of a network from which our analysis starts; it is possible to suppose that, in specific concrete situations, money is a mesh of two different nets, two different *dispositifs*. Suppose that money stands in an ensemble with (among other things) laws that link it to a particular commodity, say gold[218], this way money is defined as money commodity. Now consider another *dispositif* in which money is enmeshed with (among other things) a bank system in which only central banks can be credit institutes; this way money is defined as an outcome of the credit, the so-called fiat money. These *dispositifs* are partly different, nonetheless, both commodity money and fiat money are concretizations of value form which is, so to say, their upstream category. This is possible because, as said, the *dispositifs* are traversed by politics, which is not determined in its entirety. It is possible to distinguish three types of relations between social forms, *dispositifs* that actualize them and

[217] This criticism was first put forward by Poulantzas, *State, Power, Socialism* cit., pp. 77-78. See on this point also Lindner, "State, Domination and Politics" cit., pp. 146-148.

[218] Already in the nineteenth century the use of banknotes was more common in the everyday commerce than the use of actual pieces of gold. However, banknotes were released, firstly by individual banks, and then by central banks which promised to honor the notes in gold. The gold standard has been maintained also after the Second World War as established at the Bretton Woods conference. The only difference with the previous system was that only the U.S. dollar was covered by gold, all the other currencies had a fixed exchange rate to the dollar. Due to the impressive amount of dollars in circulation by the end of the 1960s, that made the coupling of the dollar to gold a fiction, in 1971, during the conference of Camp David, the gold standard and the fixed currency exchange rates was abolished.

trajectories of conflicts traversing them:

1. conflicts that confirm or realize a specific *dispositif* as the concrete expression of a social form, staying within it (such as conflicts around contracted working hours, organized by trade unions);
2. conflicts that undermine a specific *dispositif* that objectifies a social form, but without questioning that form in itself. In this case, conflicts could lead to the constitution of another *dispositif* compatible with the form (such as in the emergence of the neo-liberal *dispositif* in the 1980s and the 1990s after the crises of Fordism);
3. finally, under some circumstances, we have conflicts that undermine a social form in itself (such as May 1968 in France[219]).

Thus, even social forms can become a battlefield, «despite their fetishized immunisation against change»[220]. In the end, depending on the type of relation, the immanent tendency of capitalist societies towards their own reproduction could be guaranteed or, instead, impeded. This means that CSC can be grasped as a reproducing entity only if the concurrence of both forms (structure) and politics (agency) is considered.

[219] See Alexander Gallas, "Reading 'Capital' with Poulantzas: 'Form' and 'Struggle' in the Critique of Political Economy", in Gallas *et al.* (eds.), *Reading Poulantzas* cit., pp. 89-106, pp. 93-94.
[220] Buckel *et al.*, *The European Border Regime in Crisis* cit., p. 12.

3. ANTHROPOLOGICAL FORM AS FORM OF PRODUCTION OF POPULATION

3.1 THE TRINITY FORMULA AND THE NATION

In the section on social *formanalysis*, we have seen the fetishistic character of social relations in CSC, expressed in various social forms (money, capital, law, state, etc.). These fetishized forms are connected to each other shaping the abstract structural connection – ideal average/anatomy – of capitalist societies. Marx summarizes this whole that (economic) social forms constitute under the concept of "trinity formula" which refers to the "magic" formula of CSC that makes it appear capital, landed property and labor as independent and direct factors of production of the social wealth, independent sources of the value produced annually[1]. Without going into many details[2], Marx's analysis shows that capital, landed property and labor are sources of income for their owners (capital yields profit; lands yields ground rent; labor-power yields wage) only because they are means of appropriation.

> Capital is a source of income because it allows the capitalist to extract surplus labor from the labor-power he employs; land is a source of income because it makes it possible for landowners to attract a portion of the surplus value extracted by the capitalist; and labor is a source of income because the workers obtain a portion of the value they create by means of labor [. . .]

[1] For a complete development of the approach presented in this chapter in relation also to the nation and generativity, see Francesco Aloe and Chiara Stefanoni, "Anatomia della nazione. Dalla formula trinitaria alle forme della popolazione", in *Consecutio Rerum. Rivista critica della postmodernità*, no. 10 (2021). Forthcoming.
[2] See for a detailed explanation Heinrich, *Karl Marx's Capital* cit., pp. 179-185.

> Under capitalist social relations, by means of capital, land, and labor, one can appropriate a portion of the annual product in the form of income[3].

However, capitalists, landowners and forces of labor – as well as most mainstream economical theories – are under the "enchanter" effect of the trinity formula. Hence, to them, capital, ground rent and labor can become means of appropriating the value produced annually precisely because they are seen as separate sources of value. Therefore, the agents of the productive process see profit-interest, rent and wage as nothing else but the parts of value that capital, landed property and wage-labor contribute producing. In this way, the capitalist production process appears as the pure and simple labor process that is outside social-form determinations. Thus, as Marx states, the trinity formula completes:

> the mystification of the capitalist mode of production, the reification of social relations, and the immediate coalescence of the material relations of production with their historical and social specificity: the bewitched, distorted and upside-down world haunted by Monsieur le Capital and Madame la Terre, who are at the same time social characters and mere things[4].

We have seen that the trinity formula condenses the abstract structural connection, expressing the reification and naturalization of the capitalist relation of domination, making it seems that the three factors of production cooperate, autonomously but together, to the social wealth and that each of them yields what it offers. This gives us an *imaginary* framework of the positions and the functioning of the classes in which capitalists and laborers are equally necessary to the social wealth in that they play their natural role. This does not mean that there cannot be a critique of class exploitation, but that this criticism can move solely *within* capitalism, e.g. against unfair distribution of wealth or excessive demands. In fact, in the everyday "enchanted" world of the trinity formula, labor and capital, in their equal necessity, constitute the *anatomy* of that "whole" – encompassed by the state as a neutral third – which, as Heinrich puts it, «[is] invoked as the *nation*, as an imaginary community»[5].

[3] *ibid.*, p. 182.
[4] Marx, *Capital III* cit., p. 969.
[5] Heinrich, *Karl Marx's Capital* cit., p. 213.

As highlighted by Balibar, the plexus state-nation constitutes a "people" as a community greater than class divisions. Although it does not actually possess an ethnic base, it produces an imaginary *ethnos*, an ethnic form, an imaginary unit against other possible units around which it organizes itself[6]

This community "nation" is genuinely "imaginary" – in the wake of a theoretical tradition that goes from the Spinozian notion of imagination to the Althusserian one of ideology – and not "imagined" as in the conceptualization of political scientist and historian Benedict Anderson[7]. It is imaginary in the sense that it is ideological. Althusser draws the connection between imagination and ideology describing how «in the appendix to part I of Spinoza's *Ethics*» he saw «immediately the matrix of every possible theory of ideology»[8]. Indeed, in Althusser's reading of Spinoza, imagination is:

> (1) to put the (human) subject at the center and origin of every perception, of every action, of every object, and of every meaning, but (2) to reverse in this way the real order of things, since the real order is *explained* [. . .] solely by the determination of causes, which the subjectivity of the imagination explains everything by means of ends, by the subjective illusion of the ends of its desire and its expectations. This is, strictly speaking, to reverse the order of the world, to make it walk, as Hegel and Marx will say, "*on its*

[6] See Étienne Balibar, *Racism and Nationalism*, in Étienne Balibar and Immanuel Wallerstein, *Race, Nation, Class: Ambiguous Identities*, Verso Books, London-New York 1991, pp. 37-67 and Étienne Balibar, *The Nation Form: History and Ideology*, in Balibar *et al.*, *Race, Nation, Class* cit., pp. 86-106.

[7] See Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Verso Books, London-New York 1991. Anderson proposes «the following definition of the nation: it is an imagined political community – and imagined as both inherently limited and sovereign. It is *imagined* because the members of even the smallest nation will never know most of their fellow members, meet them, or even hear of them, yet in the minds of each lives the image of their communion [. . .] The nation is imagined as *limited* because even the largest of them, encompassing perhaps a billion living human beings, has finite, if elastic, boundaries, beyond which lie other nations [. . .] It is imagined as *sovereign* because the concept was born in an age in which Enlightenment and Revolution were destroying the legitimacy of the divinely-ordained, hierarchical dynastic realm [. . .] nations dream of being free [. . .] The gage and emblem of this freedom is the sovereign state. Finally, it is imagined as a *community*, because, regardless of the actual inequality and exploitation that may prevail in each, the nation is always conceived as a deep, horizontal comradeship» (*ibid.*, pp. 6-7).

[8] Louis Althusser, "The Only Materialist Tradition, Part I: Spinoza", in *The New Spinoza*, University of Minnesota Press, Minneapolis 1997, pp. 3-19, p. 6.

head". It is put work, as Spinoza superbly said, an entire "*apparatus*" [. . .] *an apparatus of reversal of causes into ends*[9].

Ideology, or imagination, is thus an apparatus of inversion. These inversions are, in Althusserian sense, imaginary "representations" that, false as they may seem, are no less real: they are incorporated in the *dispositifs* that concretize the social forms of capitalist production. Therefore, the agents of production are all subjected to this imaginary, to this inversion of causes and effects. Consequently, if ideology "represents" the relations of the individual with their world, with their conditions of existence, "representing" has to be understood as a transformation, a remodeling whose product is real and material just like what has been transformed.

Therefore, in this perspective, the nation is not a mere social construction, as it is according to the framework of symbolic interactionism which Anderson implicitly adopts, rather it is a social form, the mode of organizing political unity. The nation form is hinged on the deep opacity that transpires from capitalist relations. It is not a particular nation/nationality or a thought abstraction based on the national community/nationality or many different national communities, rather it designates the conditions of possibility of a community, as a symbolic order, on the basis of the skeleton of the trinity formula, i.e. on the basis of the inversions of the capitalist structure. The nation form is continuously shaped both by the actions of the state as a welfare state[10] and by the incessant constitution of the overall share capital through the credit system[11]. Accordingly, the nation form is integrated into a constellation of decentralized regulations whose objective is to ensure the life processes of the population/nation. This is a necessary condition for the imperative of capitalist domination and exploitation to which bodies, capacities and needs are subjected: through strategies of separation of powers, administration, and distribution of goods and services, collection of statistical regularity, through standardization and precautionary defense against risks and especially through standardized self-regulation of individual subjects.

[9] *ibid.*, p. 5.
[10] See Heinrich, *Karl Marx's Capital* cit., pp. 199-218.
[11] John Milios and Dimitris P. Sotiropoulos, *Rethinking Imperialism. A Study in Capitalist Rule*, Palgrave Macmillan, New York 2009.

3.2 FILL THE LACUNA TO EXTEND THE BOUNDARIES: FORMS OF PRODUCTION OF POPULATION

The anatomy of the community-nation and its corresponding population, however, is not exhausted by considering only the economic and political forms that constitute it.

Here we face a boundary, on one side (pointing to the need for other analytical levels, beyond social *formanalysis*), and a lacuna of Marx's theory, on the other side (which should be filled at the same analytical level of forms). By discussing this boundary and this gap it will be possible to demonstrate the emergence/need for other social forms that are not considered by Marx, which also constitute that anatomy of the community-nation, i.e. peculiarly capitalist social form of the production of population along lines of gender, species, "race" that are interconnected to the economic and political forms but that cannot be traced back to them.

As we have seen, the social *formanalysis* in its tracing the structural connection of a complex does not and cannot make any assertion on concrete aspects that go beyond the conditions of abstract possibility, the "system-limit" established by the capitalist mode of production. From a theoretical point of view, this is a boundary of such structural perspective of knowledge which makes it necessary that integration – we already dealt with – with the other analytical dimensions/levels of the social materiality: *dispositifs* traversed by politics. Consequently, staying in the complementary dynamics of "logical"-abstract and "historical"-concrete that we have seen characterizing the Marxian method, with Meißner[12], it is possible to relate the Foucauldian historical-genealogical analysis on the production of individuals and their cohesion in population through concrete *dispositifs* with the conceptual-categorial reconstruction (of the abstract systemic connection) of the capitalist mode of production. «Marx captures a connection that represents a historical condition for the diversity on which Foucault focuses, but without being reason or cause of it»[13]. Furthermore, Foucault himself repeatedly suggests that Marx's conceptual

[12] Hanna Meißner, *Jenseits des autonomen Subjekts: zur gesellschaftlichen Konstitution von Handlungsfähigkeit im Anschluss an Butler, Foucault und Marx*, transcript Verlag, Bielefeld 2010.
[13] *ibid.*, p. 187 ff.

reconstruction of the capitalist mode of production is the background against which the point of view of his *dispositifs* analysis can be understood:

> If the economic take-off of the West began with the techniques that made possible the accumulation of capital, it might perhaps be said that the methods for administering the accumulation of men made possible a political take-off in relation to the traditional, ritual, costly, violent forms of power, which soon fell into disuse and were superseded by a subtle, calculated technology of subjection. In fact, the two processes – the *accumulation of men and the accumulation of capital* – cannot be separated[14].

Now, the level of *dispositifs* testifies deep interconnection between the "accumulation of capital" and the "accumulation of humans". However, what can be said about individuals/population is not only related to the level of analysis of *dispositifs*, but also to the abstract-structural level of social forms, as in the case of class division of population. This is the lacuna of Marx's theory mentioned earlier.

This lacuna was firstly highlighted by socialist materialist feminism in the 1970s and 1980s. They see as a problem the fact that Marx limited the concept of the capitalist mode of production to commodities production alone because this limitation entails excluding from its conceptualization all that has to do with social reproduction beyond the process of commodities

[14] Foucault, *Discipline and Punish* cit., pp. 220-221 [emphasis added]. Foucault asserts this view in another crucial passage: «This bio-power was without question an indispensable element in the development of capitalism; the latter would not have been possible without the controlled insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes. But this was not all it required; it also needed the growth of both these factors, their reinforcement as well as their availability and docility; it had to have methods of power capable of optimizing forces, aptitudes, and life in general without at the same time making them more difficult to govern. If the development of the great instruments of the state, as institutions of power, ensured the maintenance of production relations, the rudiments of anatomo- and bio-politics, created in the eighteenth century as techniques of power present at every level of the social body and utilized by very diverse institutions (the family and the army, schools and the police, individual medicine and the administration of collective bodies), operated in the sphere of economic processes, their development, and the forces working to sustain them. They also acted as factors of segregation and social hierarchization, exerting their influence on the respective forces of both these movements, guaranteeing relations of domination and effects of hegemony. The adjustment of the accumulation of men to that of capital, the joining of the growth of human groups to the expansion of productive forces and the differential allocation of profit, were made possible in part by the exercise of bio-power in its many forms and modes of application. The investment of the body, its valorization, and the distributive management of its forces were at the time indispensable» (Foucault, *The History of Sexuality: An Introduction. Vol.* 1 cit., pp. 140-141).

production. Marx, indeed, unilaterally focuses on the specifically capitalistic figure of the individuals and their ability to act, starting from the forms of production of use-values.

Let's briefly see how this branch of feminism deals with such lacuna. The answer to the issue of locating gender relations at a structural level is found in extending the notion of mode of production to include sexual regulation. This is the case of Monique Wittig's concept of heterosexuality as a mode of production of individuals[15], of Butler's "mode of sexual production"[16]. Here, for example, Butler on the connection between heterosexuality and the capitalist mode of production:

> Is there any way to analyze how normative heterosexuality and its "genders" are produced within the sphere of reproduction without noting the compulsory ways in which homosexuality and bisexuality, as well as transgender, are produced as the sexually "abject," and without extending the mode of production to account precisely for this social mechanism of regulation? It would be a mistake to understand such productions as "merely cultural" if they are essential to the functioning of the sexual order of political economy-that is, if they constitute a fundamental threat to its very workability. The economic, tied to the reproductive, is necessarily linked to the reproduction of heterosexuality[17].

The problem with this kind of solution is that it falls in immediate welding of the structural/material with the economical. This compression leads to neglect of the specific capitalist separation between economic and family relations and to the impossibility of recognizing social forms that are not exclusively economic or political[18]. These perspectives are flawed because they are grounded on a conception of economics that can be reduced to demography or technique of production/ an idiosyncratic interpretation of the distinction between use-value and value, which does

[15] See Monique Wittig, "The Category of Sex", in *The Straight Mind and Other Essays*, ed. by Louise Turcotte, Beacon Press, Boston 1992, pp. 1-8 and Federico Zappino, "Quale comunismo queer. L'eterosessualità come modo di produzione", in *Comunismo queer. Note per una sovversione dell'eterosessualità*, Meltemi, Milano 2019, pp. 17-70.
[16] See Judith Butler, "Merely Cultural", in *Social Text*, no. 52/53 (1997), pp. 265-277, p. 274 ff.
[17] *ibid.*, p. 274.
[18] See Nancy Fraser, "Heterosexism, Misrecognition, and Capitalism: A Response to Judith Butler", in *Fortunes of Feminism: From State-Managed Capitalism to Neoliberal Crisis*, Verso Books, London-New York 2013, pp. 175-186, p. 181.

not take into account the question – crucial for Marx – of the difference between commodities production and production *tout court* and the character of social relationship that he attributes to value.

It is true that there is a deep interconnection between the peculiar dynamics of the capitalist mode of production and the production of population, but this relation can only be captured within a multi-leveled account of social materiality, which analytically differentiates between social forms and *dispositifs* of historical social complexes.

In this framework, if it is true that the peculiar dynamics of the capitalist mode of production – from which it is possible to identify structural goals and efficiency criteria for the orientation of power relations – have their direct field of action in the economic and political/state spheres, however, with their specific goals, they permeate all social spheres at various levels and thus provide «a general illumination which bathes all the other colours and modifies their particularity»[19].

Hence, with the constitution of the capitalist mode of production, the previous historically institutions and practices – pertaining to the sphere of population production – are transformed, receiving a certain direction and dynamics in the structuring of their strategies that allows them to constitute capitalistically specific social forms of the production of population. The interconnection between economic/political forms and forms of population should not be interpreted in deterministic terms of structure and superstructure: it is a relation of conditional contingency, of *functional interference*. However, this interference is structurally bound by the *specific separations* (economy/politics, private/public, etc.) produced by the capitalist mode of production, since they necessitate a specific cohesion which is given by the social forms of population production (and their interconnection).

3.3 ANTHROPOLOGICAL FORM: PRODUCING POPULATION AS *HUMAN*

As we have seen, the issue of population production has historically been raised in relation to gender "trouble", on one side, and to the question of

[19] Marx, *Grundrisse* cit., p. 107.

power in Foucault, on the other. Both these frameworks – like the Marxian analysis of the capitalist process of use-value production – are anthropocentric and structurally blind to "species trouble", to human-animal relations. However, as will be shown below, this blindness can be read as the effect of the specific social form that reifies and naturalizes the anthropological matrix of the production of population, i.e. the structurally violent separation of human-animal, ensuring that the imaginary community/population is/appear (immediately/automatically) human.

Thus, what can be said about the individuals as subjects of "species" (as human/animal divide) is not only related to the level of the analysis of *dispositifs* but also to the abstract-structural level of social *formanlysis*. To illustrate it and, then, to fully develop the analytical output of the more comprehensive perspective presented here, the transformation of human-animal relations in the transition from precapitalist patriarchal-pastoral social complexes to capitalist ones will be investigated. It will be examined how species relations have changed with the transition to capitalist modernity, revealing how a new social organization of the connection between the production of use-values and the production of population takes hold, and how this goes hand in hand with a new form of species domination.

In the pastoral-patriarchal forms of production, (focused on privilege), which are not based on commodity production – i.e. the products do not become social through exchange – the use-values produced by individual labor are already social and the concrete labors that produce them are immediately social inside the family. This is the case, to use Marx words, of the «patriarchal rural industry of a peasant family which produces corn, *cattle*, yarn, linen and clothing for its own use»[20].

Therefore, in this mode of production, the relations of domination and exploitation are of personal and direct dependence on the male head of the family, including animal domination. The ruling power is the property of individuals: the householder owns cattle (and hogs, chickens, and other farmyard animals) tended and slaughtered in order to meet the needs of his household. We could say that they belong to the family in the sense that the animals, as well as the children, the wife, the servants, are property

[20] Marx, *Capital I* cit., p. 171. [emphasis added]

of the head of the household (or, scaling up the social hierarchy, of the landlord) by virtue of his sovereign authority (whether *patria potestas* or military office or a juridical one).

This situation can be captured using two, somehow related, concepts: domesticity and *societas*. The notion of domesticity has been introduced by historian Richard Bulliet to make sense of a stage in human-animal relationships where social, intellectual and economic structures normalize «daily contact» with animals (including non-pets)[21]. The daily contact of this social context implies the exploitation of various, different animals for different human purposes according to their usefulness in order to potentially guarantee self-sufficiency to the patriarchal rural industry, thanks to an interlocking game of all the relations-functions disclosed by the specific qualities of each species[22]. Surely, the daily contact implies also that «most people slaughtered their own chickens and hogs, or watched their butcher carve steaks and chops from a fat-sheathed carcass»[23].

The concept of *societas* comes from the ancient Roman author and naturalist Pliny the Elder who uses it to describe the relations between humans and other animals and has been retrieved by contemporary philosopher Tristan Garcia.

> *Societas* gives concrete expression to a common bond between the specific capacities of different animals and what one species in particular, the human species, can make use of[24].

> On the whole, one could say that this mutual and functional co-presence has held sway for a long time among most Western people. They established a*societas* with other species, and therefore systems of discerning identities with and differences from the human species, by attributing functions to other animals (domestication, food, labour, company, protection, symbolic functions, and so on)[25].

[21] Richard W. Bulliet, *Hunters, Herders and Hamburgers. The Past and Future of Human-Animal Relationships*, Columbia University Press, New York 2005, p. 3.
[22] See Benedetta Piazzesi, *Così perfetti e utili. Genealogia dello sfruttamento animale*, Mimesis, Milano-Udine 2015, pp. 26-39.
[23] Bulliet, *Hunters, Herders and Hamburgers. The Past and Future of Human-Animal Relationships* cit., p. 4.
[24] Tristan Garcia, *Form and object*, trans. by Mark Allan Ohm and Mark Allan Cogburn, Edinburgh University Press, Edinburgh 2014, p. 210.
[25] *ibid.*, p. 212.

Also in this concept we find expressed the idea of (utilitarian and anthropocentric) communality ("common bond") between human-animal within a closed and self-sufficient productive nucleus. Thus, the family constitutes the spatial and functional unity of the organization of use-value production as well as population production both human and animal. It follows the same mode of organization and ordering rule.

With the transition to the capitalist mode of production, the socialization of labor changes, as well as the kind of domination and exploitation. As we have seen in the second chapter, with the generalization of waged labor the socialization of labor takes place through the fetishized social form of money (capital, credits, etc.). Domination and exploitation are impersonal. This is a change in class domination.

At the same time, animal domination changes. *Separation* within the household as *societas* occurs. The household becomes an exclusively human place for the production of human population, detached from the animal component which is managed in the economic sphere.

This situation is somehow grasped by the concept of "postdomesticity" introduced by Bulliet as opposed to "domesticity". Postdomesticity refers to a stage in human-animal relations where people are physically and psychologically removed from the animals that produce the products they use[26] and «involves treating animal products as industrial commodities and the live animals as raw materials to be processed in the most efficient way possible»[27]. This idea of separation is put forward also by Garcia: «Becoming predominantly urban [. . .], humanity restricted its everyday acquaintance with other animals to companion species, nature reserves, zoos, and symbolic functions»[28].

In the terms of the macro-logic here elaborated, it is possible to say that with the passage to CSC the *societas* dissolves and from its ashes emerges the separation between free labor-power, free in the double sense – legally free and free from any other substantive property – whose production is organized by the form of generativity, and the means of production, which animals fall into, owned by the money owners and capitalistically

[26] Bulliet, *Hunters, Herders and Hamburgers. The Past and Future of Human-Animal Relationships* cit., p. 3.
[27] *ibid.*, p. 177.
[28] Garcia, *Form and object* cit. p. 212.

produced, thus, organized by capital forms. These structural changes are clearly visible, for example, in the transformation of legal systems regarding possessing animals and the institution of centralized slaughterhouses, as we will see in the next chapter. The disintegration of the household as a unit of production of use-values and of production of human&animal population goes hand in hand with the sublimation of animal domination in a form of impersonal domination/exploitation.

Starting from this reconstruction, what can be grasped by relating the change in animal domination/exploitation to the change in class (and gender) domination/exploitation are the structural requirements that constitute the essential conditions of possibility of the social form of human-animal relations. At the abstract level of the capitalist mode of production, there is a tendency towards the destruction of the labor-power (and, more generally, of its own conditions of existence) intrinsic to the imperative of optimization of the process of valorization.

Through the coercive laws of competition, this tendency imposes itself on every capitalist who is thus driven to the extension and intensification of labor-time, the minimization of cost factor (wage, occupational health and safety measures) as well as to the continuous improvement of productive assemblages (machinery)[29]. Therefore, capital intrinsically poses a threat to the same reproduction of labor-power on whose exploitation it is based. This threat regards what Marxist feminists have called "social reproduction", *stricto sensu*, that is:

> the activities and attitudes, behaviors and emotions, and responsibilities and relationships directly involved in maintaining life, on a daily basis and intergenerationally. It involves various kinds of socially necessary work—mental, physical, and emotional—aimed at providing the historically and socially, as well as biologically, defined means for maintaining and reproducing population. Among other things, social reproduction includes how food, clothing, and shelter are made available for immediate consumption, how the maintenance and socialization of children is accomplished, how care of the elderly and infirm is provided, and how sexuality is socially constructed[30].

[29] This is merely a sketch, for a detailed account see Heinrich, *Karl Marx's Capital* cit., pp. 99-131.

[30] Johanna Brenner and Barbara Laslett, "Gender, Social Reproduction, and Women's Self-Organization: Considering the US Welfare State", in *Gender & Society*, vol. 5, no. 3 (1991), pp. 311-333, p. 314.

This systematic blindness of capital towards its own conditions of existence, to the extent that the reproduction of the labor-power is not achievable exclusively through the wage negotiated between the laborers and the capitalist, is mitigated by the intervention of the state as a *welfare state* with legal provisions (such as legal workday, minimum wage, insurance policies)[31] but mostly by the generativity form[32] that ensures the existence of this essential precondition of the capitalist mode of production. However, in order to ensure livability, it is necessary another social form that cannot be traced back to economic nor political/state (nor generativity) forms which selects population as human reifying and naturalizing it into "humanity". The production of population, therefore, takes place according to a separation, a line of "species".

On a structural level, it is only the interstitial void – opened by economic and political forms – of the split between economy and politics that makes possible the constitution of a form that *selects the population as human*, thus ensuring livability, that accumulation of *humans*, against the destructive tendencies specific to capitalism towards its own conditions of existence. There is an anthropological matrix of the process of production of population whose givenness is the effect of the fetishized "anthropological" social form.

This analysis proves that, although there are in principle no objections to the idea that in all previous social complexes, in addition to the production of means of livelihood, there was also the production of life itself qualified as distinctly human, that this was organized in specific social form and that the social construction of the "human(/animal)" was closely related to the latter, the separation between the production of use-values and the production of population *is not* a universal phenomenon of social complexes. In fact, the structural separation between a social sphere of use-value production and a social sphere of the reproduction of population is a phenomenon specific to the modern age. In this historical constellation, this separation is determined by social forms specific to "species", gender, race/ethnicity.

By including the analysis of the social forms of production of population

[31] See Heinrich, *Karl Marx's Capital* cit., p. 207 ff.
[32] On the concept of generativtiy form see Aloe and Stefanoni, "Anatomia della nazione" cit.

and their respective *dispositifs* in the study of capitalist social complexes, it is possible to focus on *qualitative changes* and *structural constants* that are usually obscured by the accentuated continuity and uniformity of the cultural models underlying concept such as speciesism, anthroparchy[33], war against animals[34] (and the same applies to gender relations in the case of the concept of "patriarchy"). For example, the centralization of slaughterhouses and farms with animals leaving the cities (human communities) can now be seen as the result of a specific *dispositif* – which will be analyzed in detail in the next chapter – of a concrete historical social complex born from the interaction, the functional interference of different social forms. Thus, that centralization is not conceivable as a historically specific arrangement of trans-historical biological-naturalistic survival phenomena, like meat-eating. Rather, it can be seen as a concrete social solution that allows the production not only of the worker but of all the social figures necessary for the reproduction of capitalist social complexes.

[33] Erika Cudworth, "Most Farmers Prefer Blondes: the Dynamics of Anthroparchy in Animals' Becoming Meat", in *Journal of Critical Animal Studies* (2008), pp. 33-46.
[34] Dinesh J. Wadiwel, *The War Against Animals*, Brill, Leiden 2015.

4. DIETARY *DISPOSITIF*

4.1 ANTHROPOLOGICAL FORM AND ITS *DISPOSITIFS*

The thesis that the forms of production of population must be in a functional relation with the forms of use-value production, together with the widespread constraint of impersonality and naturalness of capitalist forms, makes certain historical-social conditions of genesis of a special configuration of animal domination/human-animal relation accessible to analysis. This is important to understand the social and historical constitution of the naturalization of human/animal separation (and the production of human population), structurally affecting the entire configuration of species *dispositifs*.

The anthropological form, then, is actualized (both in a diachronic and sinchronic sense) as different and overlapping *dispositifs*:

1. dietary *dispositif*: the network which makes it possible the exploitation of nonhuman animals for human feeding. Here we have to consider also the by-products of this use of animals. Textile production and then clothes production with animal-derived components indeed are strictly interconnected to the food supply chain, as in the case of leather;
2. pharmaceutical-experimentation *dispositif*: the network regarding the exploitation of non human animals as experimental subjects both in the development of new drugs (for human as well as for other animals, mainly farmed animals to increase their productivity) and for scientific researches in various fields (bio-engineering, cognitive science, ethology, etc.);
3. entertaining-pet *dispositif*: the network regarding the exploitation of non

human animals for human "leisure" (zoos, theme parks, movies, safaris, dog and cat breeding, wild animals trafficking, etc.).

In order to grasp the qualitative transformation, the birth of the dietary *dispositif* will be exemplarily explored, because historically the hugest changes in form have been recorded with respect to meat production.

Since the latter half of the nineteenth century, the dietary *dispositif* in CSC is centered on meat. As Baics and Thelle put it: «meat, in particular, occupies a critical juncture for nineteenth-century food systems because no other food item was so intricately connected to urban modernity»[1] and, certainly, urbanization was a fundamental process of the nineteenth century, with the urbanized population growing fast in the period between 1820-30 and 1914 (the level of urbanization of the so-called developed countries increased from approximately 12 percent to 36 percent)[2]. More cities and bigger ones, with an expanding population coming from the countryside and, at the same time, a rise in the standard of living of the middle class, brought to the fore issues of meat supply, its production (at a bigger scale) and its demand, i.e. the issue of meat becoming a commodity. When speaking of urbanization and its role in these processes, it is important not to commit the mistake of tracing a direct causality, as if the increase in urban density *per se* and alone had as its consensual and "natural" outcome the decline of the previous organization based on household production and private slaughterhouses. On the contrary, as a *dispositif* perspective makes clear, it is an outcome of a specific trajectory, involving different elements within specific sets of power relations.

Moreover, the privileged role in the capitalist transition played by meat (especially red meat) among other foodstuffs of animal origin, also known as animal source food (ASF) – milk and dairy products, fish, and eggs – is also given from a temporal point of view. Even with relative country-specific time differences – the variability of which will be examined shortly –, in any case not exceeding the end of the century (adopting an "Eurocentric"

[1] Gergely Baics and Mikkel Thelle, "Introduction: Meat and the Nineteenth-Century City", in *Urban History*, vol. 45, no. 2 (2018), pp. 184-192, p. 184.
[2] See for a detailed account Paul Bairoch and Gary Goertz, "Factors of Urbanisation in the Nineteenth Century Developed Countries: a Descriptive and Econometric Analysis", in *Urban Studies*, vol. 23, no. 4 (1986), pp. 285-305.

focus[3]), it is the reorganization of meat production that is in the first place adapted to capitalist imperatives. The commodification of liquid milk usually follows, depending particularly on the railway expansion, thus becoming a phenomenon of the late nineteenth and early twentieth centuries[4]. Also the fishery sector started this process in the late nineteenth century (around 1880), thanks again to the role of the railroad, steam-powered fishing vessels, "power lifters", beam trawl and the first attempts in developing marine hatchery[5]. Finally, chicken meat and egg production began to adapt to this reorganization in the 1910s and the 1920s, with the shift from a subsistence household production – where backyard hens recycled organic house waste converting them to eggs, manure and eventually meat – to commercial production with the emergence of the poultry industry and the subsequent specialization between broiler and egg production[6].

Consequently, the focus will be on the first actualization of this *dispositif* during the nineteenth century, whose most distinctive elements are centralized slaughterhouses and intensive farming. Other knots of this web are: the state with its government regulation and public health reforms, the market, family, zootechnical practices, culinary practices together with the practices connected to nutrition science and dietetics (in turn, based on chemistry and biology), media and communication representations; and on the side

[3] Analogous changes in meat consumption affected Mediterranean Europe only after 1900 and East Asia only after 1950, Vaclav Smil, "Eating Meat: Evolution, Patterns, and Consequences", in *Population and Development Review*, vol. 28, no. 4 (2002), pp. 599-639.

[4] See for a sustained account of milk as a commodity, from its origin in the 1860s and 1870s to 1940, conducted in terms of «the heterogeneous relations that it embodies and mediates»: Richie Nimmo, *Milk, Modernity and the Making of the Human: Purifying the Social*, Routledge, London 2010.

[5] A complete research on fish as a commodity, in the vein of Nimmo's one is lacking, however one can see John M. Knauss, "The Growth of British Fisheries During the Industrial Revolution", in *Ocean Development & International Law*, vol. 36, no. 1 (2005), pp. 1-11 and Colin E. Nash, "Aquatic Animals", in *The Cambridge World History of Food*, ed. by Kenneth F. Kiple and Kriemhild Ornelas, Cambridge University Press, New York 2000, pp. 456-467, pp. 459-461.

[6] See for case studies in Australia: Andrea Gaynor, "Fowls and the Contested Productive Spaces of Australian Suburbia, 1890-1990", in Peter Atkins (ed.), *Animal Cities: Beastly Urban Histories*, Ashgate, Farnham 2012, pp. 205-219 and in the U.S.: William Boyd, "Making Meat: Science, Technology, and American Poultry Production", in *Technology and Culture*, vol. 42, no. 4 (2001), pp. 631-664; Donald D. Stull and Michael J. Broadway, *Slaughterhouse Blues: The Meat and Poultry Industry in North America*, Thomson/Wadsworth, Belmont 2013.

of individuals, related practices of responsible self-regulation through consumer choices. Trough this *dispositif*, in Western modernity, meat has experienced a change of purpose and function that can be understood with the expression "hygienizing meat".

4.2 DIETARY *DISPOSITIF*: STARTING WITH THE SLAUGHTERHOUSE

A net, even if it has a certain finite extension, does not have a beginning or an end by its very nature, unlike, for instance, a chain where its first and its last link are easily identifiable (even when the chain is at first entangled). The same is true for a molecule. Thus, where to start untying this dietary *dispositif*? Which knot-atom to start with? We have seen the central importance of meat for modernity. Meat is a complex, multiple object, deeply varying depending on context and time, but meat has its lowest common denominator in the act of killing animals (which itself takes shape in multifarious practices). Excluding cannibalism, necrophagy, and in vitro meat research projects[7], because of their exceptionalism, meat can be essentially defined as flesh of *killed* animals. Thus, it seems reasonable to start our analysis by taking into account the shape that the act of killing animals assumed in nineteenth-century CSC; that is, from the institution of the public slaughterhouse/abattoir.

Before proceeding further a methodological disclaimer is needed: in what follows a general account of the dietary *dispositif* and its relational heterogeneous elements (starting from the slaughterhouse, as said) is traced, detecting its patterns and trends, by relying on first-hand historical researches on case-studies (mainly collected in two books: *Meat, Modernity and the Rise of Slaughterhouse*[8] and *Animal Cities: Beastly Urban Histories*[9]. To outline a general *dispositif* with recurrent patterns of relations is possible

[7] The unsuccessful promise of in vitro meat is to create animal protein without the death of an individual creature, see Erik Jönsson, "Benevolent Technotopias and Hitherto Unimaginable Meats: Tracing the Promises of in Vitro Meat", in *Social Studies of Science*, vol. 46, no. 5 (2016), pp. 725-748.
[8] Paula Y. Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse*, University of New Hampshire Press, Lebanon 2008.
[9] Peter Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London", in Atkins (ed.), *Animal Cities* cit., pp. 33-66.

if one considers the rapid political, social and economic integration – under the forms of capitalism – of Europe, first, and, of the world, then, concentrated in the second half of the century, a first real «globalization»[10].

Just to give some examples which will be explored to a greater extent below: slaughterhouse reforms were a widespread phenomenon in Europe. Following the pioneering realization of Napoleonic public abattoirs in Paris in 1818, many other cities adopted such facilities: for example, Rouen inaugurated its central slaughterhouse in 1830, Marseille in 1848, Lyon in 1858, again Paris with the opening of a brand new structure – La Villette – in 1867, Brussels in 1840, Wien in 1851, Edinburgh in 1852, Manchester in 1872, Milan in 1863, Zurich in 1868, Frankfurt in 1861, Munich in 1865, Hamburg in 1872, Berlin in 1881, Rome in 1888, Barcelona in 1891, Valencia in 1902. Another example of this connectedness is given by the field of scientific knowledge where there was a close and intense exchange in the circulation of knowledge between scientific communities in different countries. For instance, the leading publicist of the diseased farm animals and the threats they pose to public health in Britain, the Scottish veterinarian John Gamgee, spent a year or two in continental Europe, touring the principal veterinary schools in France, Germany and Italy[11].

Moreover, adopting the perspective of food regime analysis[12], since the 1870s we witness the appearance of an emerging international food system. The notion of food regime «links international relations of food production

[10] Kevin H. O'Rourke and Jeffrey G. Williamson, *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, MIT press, Cambridge 1999.

[11] John Francis, "John Gamgee (1831-1894): Our Greatest Veterinarian", in *British Veterinary Journal*, vol. 118, no. 10 (1962), pp. 430-438.

[12] The first statement of food regime analysis is Harriet Friedmann and Philip McMichael, "Agriculture and the State System: The Rise and Decline of National Agricultures, 1870 to the Present", in *Sociologia Ruralis*, vol. 29, no. 2 (1989), pp. 93-117. Food regime analysis focuses on the following question: «Where and how is (what) food produced in the international economy of capitalism?; Where and how is food consumed, and by whom? What types of food?; What are the social and ecological effects of international relations of food production and consumption in different food regimes?» (Henry Bernstein, *Food Regimes and Food Regime Analysis: a Selective Survey*, 2015, `https://www.iss.nl/sites/corporate/files/CMCP_1-_Bernstein.pdf`. Paper presented at "Land Grabbing, Conflict and Agrarian-environmental Transformations: Perspectives from East and Southeast Asia" conference, 5-6 June 2015, Chiang Mai University, p. 1). In recent years this perspective has been revisited, especially by McMichael: Philip McMichael, "A Food Regime Genealogy", in *The Journal of Peasant Studies*, vol. 36, no. 1 (2009), pp. 139-169; Philip McMichael, *Food Regimes and Agrarian Questions*, Fernwood Publishing, Halifax 2013. For a selective survey see Bernstein, *Food Regimes and Food Regime Analysis* cit.

and consumption to forms of accumulation broadly distinguishing periods of capitalist accumulation»[13]. This system emerging in the 1870s – which has been called "first food regime" and which has been dated until 1914 – was basically centered on European, and especially British imports of basic grains and *meat* from settler colonies (Argentina, Canada, the US, Australia and New Zealand) – concomitantly with the crisis of European grain production and the expansion of farming frontier in settler states (and soil mining) –, combined with colonial tropical imports (sugar, tea, coffee, palm oil and so on). There was a British hegemony in the world market thanks to its industrial and finance capital legitimized by the rhetoric of free trade[14]. Therefore, the food regime analysis grasps the level of international relations of the dietary *dispositif*.

At the same time, the reference to case studies is crucial to address the country-specific character, sometimes even city-specific character, of this *dispositif*, and also to touch with hands, so to say, the contextual trajectories of politics within it: the actors involved and their struggles. Regarding this historical literature, according to Victorian Britain role as "workshop of the world"[15], U.K.'s cities are the best documented cases, with a long-standing historical research tradition in this field[16], followed by U.S.' cities

[13] Friedmann and McMichael, "Agriculture and the State System" cit., p. 95.
[14] See Bernstein, *Food Regimes and Food Regime Analysis* cit., table 1, p. 5.
[15] See Eric J. Hobsbawm, *Industry and Empire: from 1750 to the Present Day*, The New Press, New York 1999, p. 112 ff.
[16] Chris Otter, "Civilizing Slaughter: The Development of the British Public Abattoir, 1850–1910", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 89-106; Ian MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 107-126; Richard Perren, "Filth and Profit, Disease and Health: Public and Private Impediments to Slaughterhouse Reform in Victorian Britain", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 127-152; Ian MacLachlan, "A Bloody Offal Nuisance: The Persistence of Private Slaughter-Houses in Nineteenth-Century London", in *Urban History*, vol. 34, no. 2 (2007), pp. 227-254; Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London" cit.; Ian MacLachlan, "'The Greatest and Most Offensive Nuisance that Ever Disgraced the Capital of a Kingdom': The Slaughterhouses and Shambles of Modern Edinburgh", in *Review of Scottish Culture*, no. 17 (2004–5), pp. 57-71; Ritvo, *The Animal Estate* cit.; Harriet Ritvo, "Animals in Nineteenth-Century Britain: Complicated Attitudes and Competing Categories", in Aubrey Manning and James Serpell (eds.), *Animals and Human Society: Changing Perspectives*, Routledge, London 2002, pp. 106-126; Brian Harrison, "Animals and the State in Nineteenth-Century England", in *The English Historical Review*, vol. 88, no. 349 (1973), pp. 786-820; Anne Hardy, "Food, Hygiene, and the Laboratory: A Short History of Food Poisoning in Britain, Circa 1850–1950", in *Social History of Medicine*, vol. 12, no. 2 (1999), pp. 293-311.

(especially Chicago, due to its role of «slaughterhouse to the world»[17] and Western Europe's urban centres[18] (with Paris in leading position[19]). Detailed researches have been conducted also on Mexico City[20] and more recently on Buenos Aires[21], Rio de Janeiro[22], Barcelona[23], Copenhagen[24]

[17] Dominic A. Pacyga, "Chicago: Slaughterhouse to the World", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 153-167; Dominic A. Pacyga, *Slaughterhouse: Chicago's Union Stock Yard and the World It Made*, University of Chicago Press, Chicago 2015 and William Cronon, *Nature's Metropolis: Chicago and the Great West*, WW Norton & Company, New York 1991, especially pp. 207-259. See also the 1906 classic: Upton Sinclair, *The Jungle*, Pennsylvania University Press Electronic Classic Series, Philadelphia 2008. On Cincinnati see Steve C. Gordon, "From Slaughterhouse to Soap-Boiler: Cincinnati's Meat Packing Industry, Changing Technologies, and the Rise of Mass Production, 1825-1870", in *IA. The Journal of the Society for Industrial Archeology* (1990), pp. 55-67. On New York see Roger Horowitz, "The Politics of Meat Shopping in Antebellum New York City", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 178-197 and Jared N. Day, "Butchers, Tanners, and Tallow Chandlers: The Geography of Slaughtering in Early Nineteenth-Century New York City", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 178-197. For a comparative study on New York, Baltimore, Boston and Philadelphia, from the perspective of planning regulation see Catherine Brinkley and Domenic Vitiello, "From Farm to Nuisance: Animal Agriculture and the Rise of Planning Regulation", in *Journal of Planning History*, vol. 13, no. 2 (2014), pp. 113-135. For a comparative study on market culture in New York, Paris and Mexico City see Roger Horowitz *et al.*, "Meat for the Multitudes: Market Culture in Paris, New York City, and Mexico City over the Long Nineteenth Century", in *The American Historical Review*, vol. 109, no. 4 (2004), pp. 1055-1083. An interesting case is also New Orleans: Lindgren Johnson, "To "Admit All Cattle without Distinction": Reconstructing Slaughter in the Slaughterhouse Cases and the New Orleans Crescent City Slaughterhouse", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 198-215.

[18] On the case of Berlin's slaughterhouse delay see Dorothee Brantz, "Animal Bodies, Human Health, and the Reform of Slaughterhouses in Nineteenth-Century Berlin", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 71-88.

[19] Kyri Claflin, "La Villette: City of Blood (1867–1914)", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 27-45; Sydney Watts, "The Grande Boucherie, the "Right" to Meat, and the Growth of Paris", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 13-26; Paula Y. Lee, "Siting the Slaughterhouse: From Shed to Factory", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 46-70.

[20] Jeffrey M. Pilcher, "Abattoir or Packinghouse: A Bloody Industrial Dilemma in Mexico City, c. 18990", in Lee (ed.), *Meat, Modernity, and the Rise of the Slaughterhouse* cit., pp. 216-236.

[21] Fabiola Lopez-Duran and Nikki Moore, "Meat-Milieu: Medicalization, Aestheticization and Productivity in Buenos Aires and its Pampas, 1868–1950", in *Urban History*, vol. 45, no. 2 (2018), pp. 253-274.

[22] Maria-Aparecida Lopes, "Struggles over an 'Old, Nasty, and Inconvenient Monopoly': Municipal Slaughterhouses and the Meat Industry in Rio de Janeiro, 1880-1920s", in *Journal of Latin American Studies*, vol. 47, no. 2 (2015), pp. 349-376.

[23] Manel Guardia *et al.*, "Meat Consumption and Nutrition Transition in Barcelona, 1709–1935", in *Urban History*, vol. 45, no. 2 (2018), pp. 193-213.

[24] Mikkel Thelle, "The Meat City: Urban Space and Provision in Industrial Copenhagen, 1880–1914", in *Urban History*, vol. 45, no. 2 (2018), pp. 233-252.

and Moscow[25].

We can begin our analysis by asking a simple question: what does this brand new institution look like? This «modern creation», as it was called by the French architect Julien Guadet in his *Eléments et théorie de l'architecture* as early as 1901[26]? In responding to this question, in the first instance, we limit the analysis to a mere descriptive task, leaving in a second step the examination of the causes which have led to the emergence of such an institution.

Despite the obvious context-dependent differences which make every abattoir unique in itself, there are some recurrent essential features:

- Location. The abattoir is placed in the outskirts of the cities, distant from the city centers, connected to rural areas and urban centers through railway and/or shipping lines. In most cases, it is situated near waterways (rivers or canals). The presence of a source of abundant and fresh water is fundamental for the well functioning of the slaughterhouse complex. Waterways, indeed, allows the complex to have running water (supplied to every building by a system of pumps) and, thanks to a system of drainage, to dispose of waste (blood and unprocessed bodies or body parts), at once. Essential aspects for decent disposal, then, are the direction and intensity of the current of the watercourse.

An efficient example in this respect is, according to chroniclers of the time, New Orleans' Crescent City Slaughterhouse. The facility was located on the Mississippi River. The current of the full-flowing river flows down and away from the city, thus making the case for «the remarkable absence of all odor»[27]. Where the environmental conditions were not that favorable, the waterway could become a real "river of blood", as in Chicago's Union Stock Yard complex. The giant leader of the global meat industry, owned by the Union Stock Yard & Transit Company (USY & T Co), opened on Christmas Day 1865 and was located on the South Branch of the Chicago River. This land was a huge swamp, which poses drainage issues from the beginning. In addition, the huge amount of putrid waste dumped in the shallow body of water contaminated the creek so much that it

[25] Anna Mazanik, "'Shiny Shoes' for the City: the Public Abattoir and the Reform of Meat Supply in Imperial Moscow", in *Urban History*, vol. 45, no. 2 (2018), pp. 214-232.
[26] Quoted in Lee, "Siting the Slaughterhouse" cit., p. 47.
[27] Quoted in Johnson, "To "Admit All Cattle without Distinction"" cit., p. 210.

began to bubble from the decomposition, hence it was soon known as Bubbly Creek, as it is still called. Better solutions to the problems caused by shallow waters, however, were possible, as the example of the new Moscow's abattoir, constructed between 1886 and 1888, makes clear. The shallow and slow Moskva River, flowing through a densely populated area downstream the city, could not efficiently accomplish the task of cleaning and removing the offal of meat production. Thus, a major water filtration engineering project was implemented: every building of the complex was connected to the sewerage system that brought the waste to the filtration fields organized at a large wetland south-east of Moscow[28].

- Architecture, Exterior. The slaughterhouse is not a single building, but it is a complex of several different edifices, some of them connected by internal railways. It is a huge enclosed area which may comprise: animals holding pens and stables, gates, the killing floor in itself, special abattoir for diseased animals, refrigeration (chill and cold) rooms, dressing room, suspension room, carcass destruction facilities, livestock trading market, canning divisions, administrative offices, storerooms, apartments for the employees, hotel for drovers and livestock producers, guardhouses, laboratories and even biology museum (holding e.g. waxworks, preserved examples of animal pathologies and parasites as well as statistical materials on morbidities), library and auditorium. This is the case, for example, of Mexico City's Peralvillo slaughterhouse, officially inaugurated in 1897. The new facility was part of the progressive reform program of urban improvement undertaken by the government of Porfirio Díaz (1876-1911) and the technocratic elite which surrounded him, known as the *científicos*, the scientific ones – even if the vast majority of them were bankers –, whose intent was making Mexico a modern nation in the wake and imitation of the technologically advanced Europe and North America. In perfect accordance with this mentality, a biology museum was located on the main floor of the administrative building, standing as a monument to scientific progress. The library, where the health inspectors could keep up to date with the latest essays in the medical sector, was located upstairs, just next to the laboratory equipped with microscopes for meat inspection[29]. A

[28] See Mazanik, "'Shiny Shoes' for the City" cit., p. 220.
[29] See Pilcher, "Abattoir or Packinghouse" cit., p. 226.

similar case is Moscow's abattoir where, in addition to the laboratory and the museum, there was a 300-seat auditorium for scholarly lectures. Just like the Peralvillo slaughterhouse, Moscow's slaughterhouse immediately symbolized the commitment of municipal authorities to achieve the goal of health, in the wake and myth of European cities. For this reason, in both cases, the slaughterhouse is considered and presented to the general public as a «technological and scientific masterpiece». Precisely in compliance with this role, it is turned by the municipality into a center for scientific promotion and education[30].

Sometimes the abattoir complex also comprises meat and viscera markets. Generally, however, slaughter and butchery are disaggregated, especially after the introduction of refrigeration and canning technologies. In this organization where the production is radically separated from the consumption, the slaughterhouse is entirely devoted to rendering «animal to edible» – to borrow the incisive title of the famous book by ethnographer Noëlie Vialles[31] – while the dead-meat markets, and/or private butchers stores dispersed along the streets, and/or meat stalls at the municipal urban markets are the appointed places for the retail of a commodity which was starting to look more and more like every other commodity. Separation does not mean disarticulation, where the right hand does not talk to the left hand, so to speak. Rather, it is a regulated and coordinated system, at least ideally speaking: market integration and centralized meat processing were connected, coincident phenomenons and a result of specific – but often contested – policies[32].

In most cases, we can count as part of the slaughterhouse – regardless of their being actually inside the fence of the abattoir complex or just close to it – also facilities for by-product manufactures, such as blood fertilizer and tallow factories, tanneries, soapmakers, bone boilers, fat renders, plant for cleaning intestines, albumin factory, etc., in one word the so-called "nuisance trades".

The whole complex, as said, is separated and hidden from the outside

[30] See Mazanik, "'Shiny Shoes' for the City" cit., p. 230.
[31] Noëlie Vialles, *Animal to Edible*, trans. by J. A. Underwood, Cambridge University Press, Cambridge 1994.
[32] See, for example, the case study of Barcelona: Guardia *et al.*, "Meat Consumption and Nutrition Transition in Barcelona" cit. and the comparative study on Paris, New York, and Mexico City: Horowitz *et al.*, "Meat for the Multitudes" cit.

by a fence, it is «cloacked in banality, [. . .] purposely camouflaged by an inexpressive exterior that deflect visual attention»[33]. Usually, the buildings are arranged with logical rigor to accomplish a highly functional process of increasing «decorporealization»[34] of the living animal body. This process can take place with a movement from the foreground to the background[35]: from the living animals in the pens, near the railway platforms and the docks in the foreground (that is, more visible), to their literal fading in the thin air through the smokestacks of the by-products factories, into the background, passing through the «inner sanctum»[36] – out of sight both from people outside and inside the facilities – of the slaughterhouse. A similar process of decorporealization is accomplished, in some cases[37], with a top-down vertical movement: the edifice of the abattoir is built in height, three to seven floors; animals through ramps are taken to the top floor where they found the slaughter hall. Through openings in the floor, the various parts are removed from the animal, paws, skin, viscera, fat, etc., that would fall into the tables below where other workers do a further division, making meat, tendons, bones. In turn, they are moved to a lower floor, where their respective manufactures are located. The meat to the butcher's shop, the bones to the degreasing or gelatine manufacture, the tendons and waste used to make industrial saws, fatteners, glues.

Due to the size of abattoir areas and their complexity, these facilities were often named by the contemporary as actual "cities" or "towns". We can mention the famous "City of Blood", i.e. La Villette abattoir[38], or "Meat City", i.e. the first major slaughterhouse in Copenhagen, or "Pakingtown", i.e. Chicago's Union Stock Yard[39].

33 Lee, "Siting the Slaughterhouse" cit., p. 51.
34 Johnson, "To "Admit All Cattle without Distinction"" cit., p. 211.
35 This is the most common case. The idea of this kind of movement is elaborated by Johnson from an 1875 lithograph of the Crescent City Slaughterhouse (*ibid.*), but can be easily applied to other slaughterhouse complexes.
36 *ibid*.
37 This is Chicago's case (Pacyga, "Chicago" cit., p. 156).
38 La Villette, opened in 1867 beside Paris' fortifications in the Nineteenth Arrondissement, was part of Baron Georges-Eugène Haussman's renovation project of Paris aimed at concentrating those noxious activities related to meat, while, at the same time, distancing them from the bourgeois Paris of the new great boulevards. La Villette was the greatest market and slaughterhouse establishment in the continent: with 40 pavilions on a 54 hectares area. See Claflin, "La Villette" cit., p. 28.
39 In 1864 the stockyard covered 129 hectares. By 1900 the site grew to 192 hectares (Pacyga, "Chicago" cit., p. 154).

- Architecture, Interior. With some quantitative differences and at different pace the "truly modern" slaughterhouse is so because it is a mechanized space, first of all in the sense of mechanical means of washing and transportation. There is plenty of water, preferably running water (instead of water tanks) together with a well-functioning drainage system; there are broad paved streets lighted up by gas flames and then by electricity; there are separated, large, open, well-lighted and well-ventilated (thanks to large window frames and ventilators) halls for different species as well as separate rooms where meat can cool away. Mechanical apparatuses replace more and more the heavy human labor: waterproof floors, lift, transporters, weighing machines, aerial rails, pulleys, rails, hooks, sausage-mincers, hog-scraping devices, bullets, pistols, bolts, carbon monoxide, coal gas, telegraphs, electric currents (these last devices used for the "civilized" slaughter which implies the stunning of the animal before the killing as we will see below).

This increasing mechanization reaches its peak with the introduction of the conveyor belt and, most of all, of the wheel[40] which completes the two-story disassembly line. The wheel makes it possible for the mechanical lifting and transportation of the live animals through the workstations for the different slaughtering phases and for this reason is the device with the most significant historical fate.

The first steps in the mechanization path that would have led to the development of the disassembly line were moved in Cincinnati's slaughterhouses in the 1840s when, in place of stationary hooks, hooks – suspended from an overhead horizontal wheel – and gambrels were adopted to promptly transport gutted hogs from the killing floor to the cooling room. Still, manual lifting of the dressed hogs from station to station was required. By the early 1860s, the system was further improved by mounting a grooved wheel on a continuous overhead rail, thus eliminating the need for manual lifting of the carcass from the dressing table to the cooling room. Finally,

[40] «At the head there was a great iron wheel, about twenty feet in circumference, with rings here and there along its edge. Upon both sides of this wheel there was a narrow space, into which came the hogs at the end of their journey [. . .] It began slowly to revolve, and then the men upon each side of it sprang to work. They had chains which they fastened about the leg of the nearest hog, and the other end of the chain they hooked into one of the rings upon the wheel. So, as the wheel turned, a hog was suddenly jerked off his feet and borne aloft» (Sinclair, *The Jungle* cit., p. 38).

in 1867 a suspended hog-weighing apparatus refined the system: hogs removed from the drying room were hung on hooks and transported along a horizontal rail, then a worker had only to pull a lever to elevate the carcass above the rail and to measure its weight[41]. «The consolidation and increased mechanization of Cincinnati's meat packing industry set the stage for the flow production systems of the early 20th century [...]»[42], especially the Union Stock Yard system where the disassembly line was perfected and brought to complete effectiveness, giving Henry Ford the inspiration for the moving assembly line at the Ford Motor Company. As he himself stated: «The idea came in a general way from the overhead trolley that the Chicago packers use in dressing beef»[43].

- Who is inside. Depending on the degree of mechanization, we find artisanal master butchers and their brigades – or more generally skilled workers. In this respect, La Villette is a famous example. Due to the persistent tradition of French meat culture, the «philosophy of French *abattage*»[44] remained almost intact in the transition from the private slaughterhouses scattered all over Paris to the public abattoirs. This philosophy implied the coordinated work of six men under the supervision of a *patron boucher*: a *maître garçon*, two or three *garçons bouchers*, a fourth man, the *baladeur* – literally "walkabout" – who brought the animals from their holding pens, a fifth man, the *dégraisseur* ("degresear"), who removed the fat and the organs from the abdominal cavity and finally a young apprentice called the *agneau* ("lamb")[45]. Also in Chicago's Packingtown there were skilled laborers. Together with steady-time men who were paid a regular wage despite fluctuations in the supply of livestock, there was a privileged group of workers, who sped the lines up, known as "pacemakers"[46].

Alongside the skilled workforce, we find unskilled laborers, seldom hired for the day. It is impressive, for example, the description of the daily hiring procedure at the Union Stock Yard:

> At the crack of dawn, men and women assembled outside the meat plants. Sometimes crowd of hundreds or even thousands would wait for the

[41] See Gordon, "From Slaughterhouse to Soap-Boiler" cit., pp. 64-65.
[42] *ibid.*, p. 66.
[43] Henry Ford, *My Life and Work*, Garden City, New York 1922, p. 81.
[44] Claflin, "La Villette" cit., p. 34.
[45] See *ibid.*, p. 36.
[46] Pacyga, "Chicago" cit., p. 157.

> straw bosses and employment agents to appear and chose new employees. Representatives of the company went out into the crowd and picked those that seemed the strongest or most skilled. There was no bargaining as to wages or hours; the agent simply tapped the man or woman he chose and told them, "Come along!"[47].

Anyways, day laborers were common in Europe, too. For example, at La Villette, people used to gather in the early morning outside the front gates on rue de Flandre and, on high-volume days, the *patron boucher* hired workers from these groups[48].

Regarding the gender, ethnic and age composition of the workforce, we can say that in Europe the slaughterhouse remained an only-men space for a long time. Even when the first women were hired they did not immediately enter the production process, but rather the meat inspection stage. For example, in 1887 Berlin's Central Viehhof hired the first twenty-four female trichinosis inspectors, where inspectors were supposed to be trained veterinarians. The fact, hailed by the contemporaries as an epochal change, responded perfectly to the dominant gender stereotypes of the time and to the consequent division of labor. An author at that time stated:

> A new era has come for the city administration two dozen young ladies were hired as meat inspectors. From the critical eye and judicious care of these ladies – and who would want to doubt the presence of these attributes in gentle widows and blossoming maidens – we can confidently expect that they will stop the insidious attack of the terrible hair worm that has caused so much damage in Berlin»[49].

In Chicago's Union Stock Yard, instead, a large number of women were employed at the packinghouse, since its opening. At first, they could work only in the canning division, because they were not allowed to use knives, but after a strike in 1894, they were introduced in every previous male-only department, except the kill floor. Many of the women, as well as the men, were Polish and Lithuanian immigrants, the most representative immigrant groups (other groups were Irish and Germans and, after, African American)

[47] *ibid.*, p. 156.
[48] See Claflin, "La Villette" cit., p. 37.
[49] Quoted in Brantz, "Animal Bodies, Human Health, and the Reform of Slaughterhouses in Nineteenth-Century Berlin" cit., p. 84.

at the packinghouse. Children from the so-called "Back of the Yards" – i.e. the extremely poor and haphazard working-class neighborhood that developed to the south and the west of the packing plants – also had to work in Packingtown, at the lowest rates of pay, to help their family survives. This is why, they continued to work, giving false ages, even when in 1893 the State of Illinois passed a law prohibiting child labor under the age of fourteen[50].

In addition to the employees in the productive process, we find a plethora of other professionals and subjects: public health inspectors, veterinaries, meat inspectors, police officers, animal welfare associations' inspectors, director and administrative staff, sellers, buyers, train drivers, cleaners, guardians, workers devoted to the waiting conditional states of the animals in the pens (e.g. to feed them and to move them), wholesale butchers, commissioners, market professionals, cows (beeves, calves), pigs, horses, sheep, hogs, chickens and microbes.

From this description, in backlight, we can track the utopian slaughterhouse, the role model for concrete architectonic projects. This is the slaughterhouse envisaged by the British physician, leader of the temperance movement, and sanitation campaigner Benjamin Ward Richardson in 1876 in his book *Hygeia*:

> The slaughter-houses of the city are all public, and are separated by a distance of a quarter of a mile from the city. They are easily removable edifices, and are under the supervision of the sanitary staff [. . .] All animals used for food [. . .] are subjected to examination in the slaughter-house, or in the market, if they be brought into the city from other depots. The slaughter-houses are so constructed that the animals killed are relieved from the pain of death. They pass through a narcotic chamber, and are brought to the slaughterer oblivious of their fate. The slaughter-houses drain into the sewers of the city, and their complete purification daily, from all offal and refuse, is rigidly enforced [. . .] The buildings, sheds, and styes for domestic food-producing animals are removed a short distance from the city, and are also under the supervision of the sanitary officer; the food and water supplied for these animals comes equally, with human food, under proper

[50] Pacyga, "Chicago" cit., pp. 155-159.

inspection[51].

4.2.1 Excursus: abattoir or packinghouse? A false dilemma

In the literature, an essential, «qualitative»[52] difference is often drawn between what are considered to be two alternative slaughterhouse models: the European and the American, whose designated prototypes are La Villette, on the one hand, and the Union Stock Yard, on the other hand, the abattoir and the packinghouse, respectively. For example, the construction of the new Peralvillo slaughterhouse in Mexico City is presented as a «bloody industrial dilemma» about the adoption of one model or the other[53]. This vision was also circulating back at that time. On the one hand, for instance, the workers at La Villette, «believed that they were working in concert, unlike the automatons in an industrial American factory»[54]. Similarly, as Lee reports, a British Journalist in 1905 commented that «at Chicago there are [. . .] no slaughter-houses at all»[55]. Unlike Europe, Chicago had only slaughter "factories" where animals were treated as raw material to be processed to gain maximum profit. In addition, there were several European travelers horrified (while sometimes deeply admired) by Packingtown's conditions[56]. On the other hand, there were naively appreciations of the supposed greater bucolic vein of European slaughterhouses. For instance, in 1910 the American consul C.P.H. Nason, examining a series of reports on the organization of municipal slaughterhouses in Europe requested by the U.S. government, praised the Grenoble abattoir for its resembling a «pleasure resort or a miniature exhibition grounds»[57]. As Lee underlines: «Nason may have found the Grenoble establishment to be like "a pleasure resort" because it retained a small-scale, artisanal sensibility alien to the American factory system»[58]. It goes without saying that in the eyes of

[51] Quoted in Peter Atkins, "The Urban Blood and Guts Economy", in Atkins (ed.), *Animal Cities* cit., pp. 77-106, p. 87.
[52] Marcus Doel, *Geographies of Violence: Killing Space, Killing Time*, Sage, London 2017, p. 76.
[53] Pilcher, "Abattoir or Packinghouse" cit.
[54] Claflin, "La Villette" cit., p. 37.
[55] Lee, *Meat, Modernity, and the Rise of the Slaughterhouse* cit., p. 7.
[56] See Kenneth D. Rose, *Unspeakable Awfulness: America Through the Eyes of European Travelers, 1865-1900*, Routledge, London 2014.
[57] Quoted in Lee, "Siting the Slaughterhouse" cit., p. 46.
[58] *ibid.*, p. 47.

French commentators, for example sanitation specialist Jean de Loverdo, writing in 1906, the Grenoble project was just like any other slaughterhouse in France: «a bland box that strove for functional efficiency»[59].

There are undeniable differences between the abattoir and the packing-house, due to many contextual factors. However, the abattoir institution remains in its essential traits – which we shall be exploring below – the same in both cases. In other words, these varieties are given in a continuum, punctuated by similar technological innovations, scientific discoveries, and reforms which, because they are grafted on contingent dynamics, assume different trajectories and timing. We can try to make an example of this multi-trajectories continuum taking into account hygienic reforms and meat inspection regulations. As we will see in detail, hygienic concerns are deeply intertwined with the institution of the slaughterhouse. Indeed, the hygienic movement was a prominent actor in the setting up of European municipal slaughterhouses, while the lack of concern for hygiene conditions in favor of profit alone was a recurrent refrain as to Chicago. This is a matter of fact, but we can make two considerations here.

First, what is designated under the label of hygienic concerns changes through time: La Villette, for example, was an efficient answer to mid-century hygienic needs which were basically based on the so-called miasma theory and, consequently, focused on environmental concerns about the presence of livestock and private slaughterhouse scattered in the city of Paris. Nevertheless, since the 1880s La Villette started to be considered an obsolete, «repulsive», «unhealthy» and an «inconvenient» system, to cite again Loverdo[60]. Another observer noted in 1906:

> This establishment has no unity of design. Groups of pavilions are crowded together, separated by streets where animals, vehicles, meat, manure all mix and mingle [. . .] As a result, surveillance is impossible, sanitary inspection is insufficient and filthiness is the rule[61].

In this quote certainly one finds again miasma theory inspired complaints, however, by the end of the nineteenth century, bacteriology and the discovery of microbes enriched these environmental concerns, making La

[59] *ibid*.
[60] Quoted in Lee, "Siting the Slaughterhouse" cit., p. 62.
[61] Quoted in Claflin, "La Villette" cit., p. 27.

Villette completely inadequate to answer this shifted notion of hygiene. In the same 1906, overseas, there was a response to similar hygienic concerns: The Pure Food and Drug Act and the Federal Meat Inspection Act, signed by U.S. President Theodore Roosevelt which regulated, on a federal level, adulteration of meat and meat products and ensured sanitary conditions and inspection for productive phases. These laws did not fall into a total legal vacuum. They drew not only upon many precedents, provisions, and legal experiments pioneered in individual states but also upon meat inspection laws of the 1890s enacted to assure products export[62]. In the same way the hygienic concerns were not born anew with the publication in 1906 of Upton Sinclair's muckraking novel *The Jungle*. An outcry over unsanitary conditions and inadequate inspection in the meat chain was already in the air those years, for example fomented by *Progressive Era* publications of the day. What Sinclair's book did was, in a social context like this one, to act as an impulse, a triggering event for the emergency of meat consumption (with attached hygienic concerns) as a *central object of public debate*. The same scandal-debate-reaction dynamic had happened in Europe, but on another level: triggering events were epidemics, both epizootics and zoonoses. For example, slaughterhouse reforms in Berlin and the creation of the Central-Viehhof abattoir in Berlin were triggered by the discovery of trichinosis in relation to numerous deadly outbreaks[63]. Or again, in Britain, the first legislative steps toward slaughterhouse and livestock markets regular inspections were triggered by the outbreak of cattle plague that started in 1865[64]. The relevance of the emergence of meat as an object of public debate was well recognized by the contemporaries, as the massive use of the newspapers as debate arena testify and as another French veterinarian – going back to La Villette's need for hygienic improvements – underlined:

> The refusal to implement changes made no sense [. . .]. Was it because municipalities did not want to spend money to reconfigure the spaces, or because butchers were unwilling to abandon traditional methods? Most

[62] Food and Nutrition Board Institute of Medicine (US), *Cattle Inspection: Committee on Evaluation of USDA Streamlined Inspection System for Cattle (SIS-C)*, 1990, pp. 8-9.
[63] See Brantz, "Animal Bodies, Human Health, and the Reform of Slaughterhouses in Nineteenth-Century Berlin" cit., pp. 74-75.
[64] See Perren, "Filth and Profit, Disease and Health" cit., pp. 140-145.

> likely, he concluded, it was because the general public had no opinion: it just wanted its meat, cheap and in large quantities[65].

4.3 INDUSTRIAL FARM INTERLUDE

The slaughterhouse, which for convenience we have defined as modern in its being essentially a centralized and a mechanized space for the killing and dismembering of animals, could not have worked at all and, therefore, would not have existed in this form if, in the meantime, the other fundamental institution of zootechny – animal breeding – had not undergone major changes (in turn also partly affected by changing slaughter requirements) becoming, likewise, capitalistically oriented. For disassembly to be efficient inside these slaughterhouses it is necessary that:

> The specimens arriving from the farm are equivalent products to each other and all of them are commensurate with the machines that have to handle them, which in turn are calibrated to the size, strength, weight of the *normalized* animal body[66].

The mechanization has no grip on bodies which present a high individual variability, but requires and contributes in turn to produce functionally standardized bodies, «the exemplary body of a species, in the sense that it is an interchangeable piece of a model of a species»[67]. In other words, «the species is perfected and specialized in the same way as the tools used for its containment, for its nourishment, for its killing. They are made for each other»[68]. As highlighted by Piazzesi, whose study regarding the genealogy of zootechnics and industrial farming is the main basis for this section, the fundamental zootechnical apparatus that is a condition of possibility of such a serial body of the animal is the shed, or better said, the perpetual housing regime. In this regime, unlike the seasonal housing formula, animals only leave their cages at very rare and decisive stages of their life, such as when they have to be transferred to another facility to fulfill another function (e.g. from a growth plant to a fattening one) and, certainly, in order to be transported to the slaughterhouse. Under this

[65] Quoted in Lee, "Siting the Slaughterhouse" cit., p. 62.
[66] Piazzesi, *Così perfetti e utili* cit., p. 152.
[67] *ibid.*, p. 82.
[68] *ibid.*, p. 137.

regime, therefore, nor feeding, nor manuring, nor working in the field, nor reproduction are reasons to leave the shed.

1) Regarding feeding (or, better said, fattening) operations, animals lose any residual portion of "self-sufficiency" and freedom which they can have, for example, during the grazing period in seasonal housing formula (in the case of cattle or sheep) or when they are raised in the backyards or, even, left free to wander the city (as in the case of pigs and poultry). Therefore, thanks to continuous housing, the constant management and control of the breeders over the feeding and over the movement (ideally tending to immobility) of the animals are complete.

Together with the sheds, then, there are barns and haystacks where to stock large amounts of long-lasting food to feed ever larger masses of livestock throughout the year. A feed which is more and more artificial, more and more productivity-driven (less expensive and more profitable), thanks to the improvements in chemistry and in the zootechnical branch of «rational feeding», which started to develop as early as the 1770s[69], and then merged in the development of nutrition science, with its calculated feed analysis to determine nutrient supply.

Experiments on the ideal – from the point of view of transforming food input into fat output – diet regime were conducted by comparing heterogeneous combinations of food in order to determine the basic elements of animal nutrition. The first experiments were still tied to the old agricultural products (wheat, peas, potatoes, milk, etc.) and, therefore, to the deadlines for fodder crops[70]. At the beginning of the nineteenth century, however, the experiments went further by introducing industrial waste and grains coming mainly from the dairy industry, distilleries and breweries. Usage of spent grains from breweries and distilleries initially spread in the context of urban farming as a feedstuff for urban cows and pigs in order to minimize the cost of inputs. Given the proximity of these urban factories, it was more convenient to buy their nutritionally richer spent grains, than buying large

[69] See, for example, *Experiments on fattening hogs* in Arthur Young, *Annals of Agriculture: And Other Useful Arts. Vol I*, Bury St. Edmund's, London 1784-1815, Vol. 1, pp. 332-351.
[70] In 1810 a German scientist named Albrecht Daniel Thaer developed the first feed standards by comparing potential feedstuffs to meadow hay and assigning a 'hay value' as a comparative measure. See Donavyin Coffey *et al.*, "Review of the Feed Industry from a Historical Perspective and Implications for its Future", in *Journal of Applied Animal Nutrition*, vol. 4 (2016), pp. 1-11, p. 1.

quantities of fodder from the countryside. This favored a new synergy between factories and farming that took the place of the old one between fields and farming. Therefore, these new industrial feedstuffs, these new manufactured formulated feeds[71] – easier to transport and to concentrate in less space as well as more nutritious – replace fodder, whose transport in large quantities from the place of production (the countryside) to the place of consumption (livestock farming) had become problematic.

2) Manuring is no longer a reason to leave the shed. Under the perpetual housing regime also animals' excreta become object of rational management. This management is orientated toward dung recollection – to be sold – and, after the introduction of chemical fertilizers, toward its disposal. The "charmed circle", to use the expression of a commentator of the time[72] between cities and their peri-urban manured region also experienced this process. In the late eighteenth century and until the 1880s large cities across Europe and North America had implemented a circular system of constant recycling of the vast quantities of dung from the many urban animals (mostly horses and cows) included the cattle and sheep that were driven through the streets on their way to the market. In some cases, such as in Paris, also human waste from the dwellers could be turned into agricultural fertilizers, called *poudrette*, when mixed with other substances (charcoal, gypsum, ashes, earth, peat, or sawdust) and after having undergone a drying process in special plants. The manure was recollected and transported, first by road and then by train, to a peri-urban region where it was utilized in horti-culture and hay-making. These in turn provided sustenance for urban animals and humans. The system of recollection was based mainly on private deals between owners of individual stables and farmers and market gardeners, but there were also collection points where vast amounts of manure were accumulated. This virtuous cycle is well captured by an observer of the time regarding

[71] The animal feed industry took off in the 1880s. The first corn gluten was manufactured in 1882. In the 1890s meat scraps were one of the first by-products to be recognized for their superior nutritional value and adopted by the emerging commercial feed industry. Here we can see the dominant role of protein in nutrition science which will explore below at length. The 1890s also introduced the incorporation of brewing by-products into animal feed and saw the start of Purina Mills in 1894 (*ibid.*, p. 2.).

[72] Quoted inPeter Atkins, "The 'Charmed Circle'", in Atkins (ed.), *Animal Cities* cit., pp. 53-76, p. 63.

agriculture in the environs of London:

> Here we have a striking example of town and country reciprocation. The same waggon that in the morning brings a load of cabbages, is seen returning a few hours later filled with dung. A balance as far as it goes is thus kept up, and the manure, instead of remaining to fester among human beings, is carted away to make vegetables[73].

This circle gradually broke. On the one side, in the 1860s hay and oats from the peri-urban areas struggled to compete with the importation of maize which created cheaper provender. They also lost ground due to the spread of the practice of feeding urban animals with spent grains from distilleries in the cities. On the other hand, the usage of fresh animal manure declined under the competitive pressure of guano imported from Peru[74] and, most of all, industrial chemical fertilizers, which could be afforded by middling and larger farmers. As it has been noted: «manure became a 'bad' after having for so long generated a virtuous circle of fertility and prosperity»[75]. From once being a profitable business it became a public useless bad creating smells and dust, attracting flies, and associated with diseases. It only had to be discarded, and often one was even obliged to pay for its removal as trade refuse.

The new fertilizers, just like the new feedstuffs, were more concentrated, thus more powerful, more practical as to transport; in short, more effective. The nineteenth century was the great season of the development of industrial fertilizers; just think of the invention, and its immediate industrial production and commercial success, of calcium superphosphate. This chemical compound was developed treating bone purchased from slaughterhouses with sulphuric acid, in the early 1840s by English en-

[73] Quoted in *ibid.*, p. 53. London, indeed, had a flourishing manure-horticulture integrated system, although probably not as intensive as in Paris where at its peak between the 1840s and the 1880s one million tons of town dung was responsible for 100,000 tons of primeur vegetables delivered to the central markets (*ibid.*, p. 58). As to London «the broader manured region [. . .] was initially the radius of convenient cartage, about five to ten miles at the beginning of the century, expanding with better roads to perhaps 15 to 20 miles and, later, with railway carriage, as far as 50 miles» (*ibid.*, p. 54). It was ideally organized in concentric circles; the outer one was devoted to the production of fodder and the inner one to that of fruit and vegetables.

[74] Gregory T. Cushman, *Guano and the Opening of the Pacific World: a Global Ecological History*, Cambridge University Press, Cambridge 2013.

[75] Atkins, "The 'Charmed Circle'" cit., p. 66.

trepreneur John Bennet Lawes together with English agronomist Joseph Henry Gilbert[76]. Also, German scientist Justus von Liebig's theory of mineral nutrient with the identification of nitrogen, potassium, and phosphorus' essential role for plant growth and the subsequent development of nitrogen-based fertilizers are worth mention[77]. As Piazzesi underlines[78], the advent of fertilizers in the fields (as well as the launch of artificial mashes in sheds' trough) is preceded and made possible by a long process of systematization in the sense of modern chemistry of those knowledges concerning the transformation of matter, inaugurated in 1661 with *The Skeptical Chemist* by Robert Boyle. Chemistry of soils and plant and animal products answers the quest for the secrets of their fertility and spontaneous functionality. Prominent figures in this process were two scholars: English agriculturist Jethro Tull and Scottish physician and medical professor Francis Home. In the 1730s Tull identified the fundamental process of crushing the soil[79] and invented an improved seed drill, and in the 1750s Home experimented with the fertilizing power of different substances, comparing the performance of manure with artificially extracted compounds in the laboratory (e.g. organic nitrogen, ammonium carbonate). Home was looking for the active ingredient, the single elementary extractable, and, hence, reproducible, substance underlying plant nutrition, setting the path for industrial chemical fertilizers.

3) Working in the field is no longer a reason to leave the shed. Animate energy, i.e. oxen and especially the more efficient horse energy, had long been used for hauling the plow and harrow, pulling the cart or wagon and grinding the corn, using a horse mill. Beginning in the 1790s with the first, rudimentary experiments to introduce steam engine in agriculture, a slow, but inexorable process of mechanization leads to replacing animal labor-power with the form of power already dominant in manufacturing,

[76] See for an overview A. E. Johnston, "Lawes, John Bennet and Gilbert, Joseph Henry", in *Encyclopedia of Soils in the Environment. Vol. 2*, ed. by Daniel Hillel, Elsevier, Amsterdam 2005, pp. 328-336.
[77] See William H. Brock, *Justus von Liebig: The Chemical Gatekeeper*, Cambridge University Press, Cambridge 1997.
[78] Piazzesi, *Così perfetti e utili* cit., pp. 53-66.
[79] See Laura B. Sayre, "The Pre-History of Soil Science: Jethro Tull, the Invention of the Seed Drill, and the Foundations of Modern Agriculture", in *Physics and Chemistry of the Earth, Parts A/B/C*, vol. 35, no. 15-18 (2010), pp. 851-859.

i.e. steam power[80].

> The availability of cheap iron and the need for more powerful equipment led to the rise of the modern agricultural implements industry which from the 1840s provided iron ploughs, drills, reapers, steam threshing engines, in the 1870s reaper-binders and elevators, in the 1890s the first milking machines, combine harvesters and tractors[81].

Speaking from a mere technological perspective, by the end of the 1850s, when John Fowler patented the first practical cable-drawn system of steam plowing, horses could have disappeared from the fields. However, one has to wait until the mid-twentieth century for this process to take over animal power extensively[82]. Indeed, the high capital cost of engines and implements was affordable only to middling and large farmers. A further reason for the continued dominance of the horse on most farms was the small size and awkward shapes of fields.

4) Reproduction is no longer a reason to leave the shed. The first artificial insemination experiment was conducted in 1779 by Italian Catholic priest, biologist and physiologist Lazzaro Spallanzani using dogs[83]. The invention of artificial insemination was a crucial step in the improvement of eugenic systems which at the turn of the eighteenth century and during the nineteenth century transformed the zootechnical sector. This technology,

[80] See for further reference on steam power Clark C. Spence, *God Speed the Plow: the Coming of Steam Cultivation to Great Britain*, University of Illinois Press, Champaign 1960; Raine Morgan, *Farm Tools, Implements, and Machines in Britain: Pre-history to 1945: a Bibliography*, University of Reading and the British Agricultural History Society, Reading 1984. On mechanization of English agriculture in general see W. Harwood Long, "The Development of Mechanization in English Farming", in *The Agricultural History Review*, vol. 11, no. 1 (1963), pp. 15-26; Edward J.T. Collins, "The Rationality of 'Surplus' Agricultural Labour: Mechanization in English Agriculture in the Nineteenth Century", in *The Agricultural History Review*, vol. 35, no. 1 (1987), pp. 36-46.

[81] David Grigg, "The Industrial Revolution and Land Transformation", in *Land Transformation in Agriculture*, ed. by M. Gordon Wolman and F.G.A. Fournier, John Wiley & Sons, Hoboken 1987, p. 93.

[82] «Prior to the third quarter of the nineteenth century the impact of machinery in agriculture was slight compared with that in manufacturing industry. Some operations such as barn work and hay and corn harvesting had been largely mechanized by 1880 but, up to the Second World War, many were still performed by hand labour and large numbers of workers were still required for seasonal tasks such as hop- and fruit-picking and vegetable cultivations» (Collins, "The Rationality of 'Surplus' Agricultural Labour" cit., p. 36).

[83] Ernesto Capanna, "Lazzaro Spallanzani: At the roots of modern biology", in *Journal of Experimental Zoology*, vol. 285, no. 3 (1999), pp. 178-196.

together with selection and crossbred, was labeled "rational breeding" by breeders at that time, who were pushed to optimize their production in order to satisfy urban growth and its needs.

Robert Bakewell is considered to be one of the firsts breeders to be aware of the possibilities of animal selection for commercial purposes. His Leicester Longwool sheep still remains the most successful modern long-wool cross. His two-pounder ram and his Midland black horse, for example, were famous all over the U.K. because of their high-quality.

When it comes to animals which are meat-to-be, high-quality means essentially the capacity to mature quickly: «'that is, a natural propensity to acquire a state of fatness, at an early age, and, when at full keep, in a short space of time'»[84]. Thus, it is clear that «Bakewell's success as a breeder was founded on his ability to meet market demands by producing a better beast for the butcher»[85]. Important in the establishment of this rational breeding system were also breed societies and prize competitions. The most famous among the associations for breed selection and conservation was the Smithfield Club which in 1799 organized the first public expo. Clubs were devoted to deposit and protect ideal prototypes of animal strains, while prize competitions were used to connect these models with the zootechnical population of the country. This connection with field experts worked as a stimulus for the breeders to innovate existing ideotypes and standards following and dictating the market's needs.

Innovations in eugenics are driven by the separation and fragmentation of productive sectors which means a separation of the processes to which animals are subjected. Selection procedures aim to design breeds to serve specific purposes: cow milk, meat animals, breeding animals, broilers, laying hens, wool sheep... The animals are shaped in view of a single exploitable characteristic, which also becomes the only possible level of relationship with them. This, together with the exportation of the most successful breeds, leads to a drastic decline in the number and range of available breed and, consequently, of diversity[86]. The refinement of the

[84] David L. Wykes, "Robert Bakewell (1725-1795) of Dishley: Farmer and Livestock Improver", in *The Agricultural History Review* (2004), pp. 38-55, p. 44.
[85] *ibid.*, p. 38.
[86] For example, after England's pursuit of Argentina's wheat and meat industry, cattle barons in Argentina began to import English cattle breed – designed to produce fattier and more desirable meat – such as English Shorthorn as early as the 1820s, or later in

rationalization process of eugenic practices inside farms, then, will be advanced, first, by the scientific recognition of Darwin's theory of evolution and, second, by the establishment of genetics which incorporated Mendel's discoveries. There is a certain degree of circularity as to Darwin's theory and breeding farm, because Darwin, by his own admission[87], has a debt with those intuitive zootechnical practices, with the rational breeding of the late eighteenth century and nineteenth century[88]. As Piazzesi underlines, biology – Darwin as well as Pasteur – finds its "laboratory", a *conditio sine qua non* for early modern scientific criteria, in the «highly-selected – and therefore serialized – animals of the new factory farming»[89], the normalized animal, the exchangeable and identical specimen. Such perpetual housing

1879 the Scottish Aberdeen Angus, to interbreed with Argentine Criollo cattle – heartier and able to reproduce at higher rates under intense nutritional constraint. This process sacrificed the initial potential for cross-fertilization and increased diversity. «In sync with the majority of commodity producing agribusinesses, which thrive on assembly line processing of like products for efficiency, the range of cattle breeds available to the market dwindled from 57 registered breeds to the active use of less than five dominating breed type» (Lopez-Duran and Moore, "Meat-Milieu" cit., p. 259). Moreover, in some cases, the adaptability of European imported breeds to improve livestock quality in South America had to clash with unfavorable climate and environmental conditions of tropical and semi-tropical areas, such as in Brazil. «The quality of animals in Brazil, in relation to the vegetation [. . .], also hindered livestock improvement in several areas across the country. The local *crioulo* was quite small and lean, 'weighing on average not more than 400 lbs. when dressed'; by way of comparison, a purebred weighed approximately 1,000 lbs. European breeds did not adapt easily to the tropical climate of central Brazil, and as a result, contrary to experiences in temperate areas of the continent, these imported animals were severely affected by heat, humidity and cattle ticks» (Lopes, "Struggles over an 'Old, Nasty, and Inconvenient Monopoly'" cit., p. 355).

[87] See Charles Darwin, *The Origin of Species by Means of Natural Selection: or, the Preservation of Favored Races in the Struggle for Life*, Cambridge University Press, Cambridge 2009, pp. 22-25.

[88] See Piazzesi, *Così perfetti e utili* cit., pp. 101-109.

[89] Benedetta Piazzesi, "Scientific Bestiarium: The Living, The Dead, and The Normal", in *Bestiarium. Human and Animal Representations*, ed. by Mariaelisa Dimino *et al.*, Mimesis International, Milano 2018, pp. 81-102, p. 96. Such link between farm and evolutionism is of primary importance. «As Darwin started to use animal breeding to explain the natural history, linking them in a mutual epistemological field, he naturalized zootechnics on the one hand, and artificialized nature on the other. The main concept of evolutionism is that of 'natural selection'. In Darwin's choice of these two otherwise oxymoronic words, we can begin to understand and evaluate the importance of his indebtedness to breeders' knowledge and to its conceptual implications. By speaking of nature through the concepts and categories of zootechnics, Darwin radically transformed the representation of nature itself. Natural history, based on the model of zootechnics, is thus combined with industrial production to become a colossal factory of living beings. Industrial breeding appeared to Darwin and to his – and our – contemporaries as the rationalized continuation of nature» (*ibid.*, p. 95).

regime (the kernel of industrial farming) can be seen as the symbol of modern restructuring of rural economy and of the birth of zootechnics as such; that is, where livestock farming is separated from agriculture. The coinage of the word "zootechnics" in itself by French agronomist De Gasparin in his *Cours d'agriculture* published between 1843 and 1851, indeed, was a way to definitively establish the separation of the two kinds of knowledge and practices, both on a descriptive and normative level. Unlike the circularity of the previous model, which symbol is the sixteenth-century farm[90], the patriarchal rural industry of a peasant family – to recall Marx's expression introduced in the previous chapter – where the field and the shed create an ideally autarchic closed system by means of the integration between fodder, manure, and animal labor-power, the new zootechnical complex (as well as modern agriculture) is an open, *input* and *output* system, which follows capitalist commodities production practices, namely individual labor spent privately and trade. To use again Piazzesi's words:

> Fodder, manure and labor-power are the substances of this exchange [between livestock farming and agriculture] which is only defused when each of them finds a substitute by the industrial world: feed, fertilizers and steam engines are the new factors in a relationship that no longer links agriculture and livestock farming, but both to the rest of the industrial production apparatus[91].

Therefore, the restructuring of the zootechnical institution can be seen as the precipitate, so to say, of that prior rationalization process which knowledges (chemistry, veterinary, biology) and practices had undertaken, a rationalization process which, at the same time, can only intervene *over the course* of the distancing of livestock farming from the countryside. Without entering the debate about tracking the English agricultural revolution[92]

[90] See Piazzesi, *Così perfetti e utili* cit., pp. 25-39.
[91] *ibid.*, p. 129.
[92] See Mark Overton, "Re-Establishing the English Agricultural Revolution", in *The Agricultural History Review* (1996), pp. 1-20 and Mark Overton, *Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500-1850*, Cambridge University Press, Cambridge 1996, vol. 23 for the standard view which tracks in the years from c. 1750 to c. 1850 a one and a real revolution in which enclosure plays an important role in accelerating the process (p. 3). See Robert C. Allen, "Tracking the Agricultural Revolution in England", in *Economic History Review* (1999), pp. 209-235 and Robert C. Allen, "The

as to zootechnics, it is generally accepted that the introduction of legumes in crop rotation and enclosures encourages the adoption of the perpetual housing regime and contributed to consolidating it. The importance of legumes in agriculture – which was discovered in the sixteenth century and increasingly spread until the nineteenth century – is due to their ability to regenerate the soil while, at the same time, furnishing vast amounts of food for the livestock increasing its number. Enclosures – i.e. the process of consolidating small landholding into larger farms by means of fences and entitling it to one owner who has land complete and exclusive availability – also had its pick in the last decades of the eighteenth century and the first decade of the nineteenth century with the parliamentary enclosures. This process took part in the removal of livestock from the fields pushing it in the shed in two ways. On the one hand, the massive restructuring of territorial balance that enclosures elicited interacted with legumes development, transforming pastures into new arable land. On the other hand, enclosure lands ceased to be common land for communal use, so that peasants could no longer drive their cattle in vast unfenced areas.

4.4 NOTES ON PRE-CAPITALIST SLAUGHTERHOUSES

Going back again to the previous description of the abattoir's architecture, exterior and interior, it is possible to identify the general, non-descriptive, essential features of this modern institution. We have already detected *mechanization* as one of these traits. The abattoir is «a directional, heavily (but not totally) mechanized space set aside for the purpose of mass sanitized killing»[93]. This space is also a big enclosed area, a "town", where every phase of meat production, every actor involved in it, is concentrated and under the control of one actor, namely the owner of this facility (whether

Nitrogen Hypothesis and the English Agricultural Revolution: A Biological Analysis", in *The Journal of Economic History*, vol. 68, no. 1 (2008), pp. 182-210 for the revisionist reading which tracks two agricultural revolutions, interrupted by a stagnation period. In this perspective, the first period extends from the second half of the sixteenth century until the second half of the eighteenth century and was accomplished by small-scale farmers in the open fields. Then, between the 1750s and the 1800s, precisely in concurrence with the period of parliamentary enclosures, there is a stagnation period. Finally, in the first half of the nineteenth century, there is a tremendous increase in production: the second agricultural revolution (*ibid.*, pp. 215-216).

[93] Otter, "Civilizing Slaughter" cit., p. 105.

a private or public subject). Ideally, large-scale slaughterhouse becomes the only place where the killing of animals for consumption purposes is authorized. *Centralization*, or «agglomeration»[94], thus, is abattoir's second essential feature.

In order to grasp the peculiarity of the new nineteenth-century abattoir, it is useful to draw a quick comparison, on a mere descriptive level again, with the pre-capitalist system of institutionalized animal killing for food based on small-scale private slaughterhouses and essentially characterized by dispersal and privacy[95].

Dispersal: there was no single, detectable, nor mono-functional space where animals were slaughtered and carcasses were dressed. There were many, scattered and different places where these operations could occur, such as household's backyards, mostly in the case of chickens and hogs, and butcher's sheds, mainly to slaughter cattle. Such dispersion and variety in places reflected itself also in variety in the equipment and tools for slaughter and carcass-handling (poleaxes, knives, hooks of various dimension, ropes, pulleys, boxes wrappers, hampers, packages, work tables, rings fastened to the floor or walls, wooden bars, prytches[96]), from very domestic and poor ones to those more sophisticated and rich ones of healthy butchers' stalls, in the back of their shops. Slaughterhouses were typically small, composed of one room (sometimes there was one main room for the killing plus one or two smaller rooms used for meat processing). This made the separation of living animals from fresh meat impracticable so that cattle and sheep witnessed in terror as other animals were killed. Not only they were small, but they were also dark, almost windowless, poorly ventilated, and often without tap water-supply.

Privacy: in the double sense of free from public attention and private, as to property rights. Inside slaughterhouses only the master butcher and his assistants (if there were) were allowed to be, together with animals and microbes. It was difficult for non-desired eyes, such as public inspectors, to enter these places. Small slaughterhouses implied a sort of "one to one"

[94] *ibid.*, p. 94.
[95] See *ibid.*, p. 90.
[96] «A prytch is a stout stick of wood about two feet long, provided at each end with a stout iron point. The point at one end is forced against the carcase, while the other point is slipped into little shallow holes in the floor which are termed 'prytch-holes'». (Quoted in Atkins, "The Urban Blood and Guts Economy" cit., p. 85.

ownership, animals were private property of who was going to killed them. People slaughtered their own poultry and hogs raised in their backyard, and so did the butchers: because they have bought them at the market, they own the cattle they personally slaughter and, then, sell as meat.

> In the early nineteenth century, [. . .] butchers bought living animals from local or large regional markets, killed them in innumerable small private slaughterhouses and then sold the meat themselves or to markets [. . .]. When contemporaries used this word "slaughterhouse", though, they did not refer to a structure built with the explicit and sole purpose of killing animals and dressing carcasses. They simply referred to any building in which slaughter happened to take place. So there was usually *nothing technically or architecturally distinct about the slaughterhouse* [. . .] Elsewhere, we find references to "shed" or "old washhouses" being used for slaughter.
>
> Slaughterhouses thus intermingled with domestic houses: sometimes the former were entered through the latter, and from the outside both might be indistinguishable. Butchers might even dispense with all pretense of distinction and choose to kill animals in their own front rooms[97].

As an 1845 report states:

> Most of the slaughtering-houses [. . .] are in the midst of the town, in a long narrow alley passing from the main street to a parallel street at a considerable distance. Those slaughtering-places are very confined, and generally have a muck-yard attached, which is filled with the offal, dung, and blood, taken from the animals, and most offensive effluvia are constantly flowing from the purifying masses; the bloody matter, moreover, flows in streams along the open channels towards the covered sewers in the streets[98].

These slaughter sites were truly innumerable if one takes into account the almost complete absence of a systematic counting of them. For example, in London alone in 1873, i.e. before the first government measure to nationally regulate slaughterhouse structures (the 1874 Slaughterhouse & c. Metropolis Act and the 1875 Public Health Act), there were 1500 estimated licensed private slaughterhouses[99], but the number rises if we consider the illegal and unlicensed ones. In addition to butchers, there

[97] Otter, "Civilizing Slaughter" cit., pp. 90-91. [emphasis added]
[98] Quoted in Atkins, "The Urban Blood and Guts Economy" cit., p. 84.
[99] MacLachlan, "A Bloody Offal Nuisance" cit., p. 247, Figure 1.

were other meat vendors in early nineteenth-century cities and markets, such as peddlers, meat-sellers with mobile stands, or female meat-sellers, known in French as *regratières*[100], meat purveyors who sold food from their homes or corner stalls or plied regular routes with horsedrawn carts[101]. All these figures animating the meat supply scenario often sold their own – illegally – butchered meat as well as recycled meat scraps.

During the late nineteenth century, this varied and teeming scenario is gradually disappearing replaced by the modern institution of the slaughterhouse. This replacement was not an immediate and absolute rupture with the old model, the small-scale slaughterhouse persisting well into the first half of the twentieth century and coexisting with the new[102]. Nevertheless, the introduction of the abattoir system qualitatively redefined the whole meat production and distribution structure, making this persistence increasingly irrelevant and marking an essential change.

So, what were the dynamics that led to this introduction and change? Or, to use the lexicon of our macro-logic, what is the conflict and the politics (political trajectories) around which the match of the slaughterhouse (the problematic of the production and supply of meat) and, with it, of the first actualization of the CSC dietary *dispositif* is played?

4.5 DYNAMICS OF FORMATION OF THE DIETARY *DISPOSITIF*

4.5.1 Context analysis: slaughterhouse reforms in health vs. wealth conflict

Following the first step of HMPA we will sketch the structural backdrop context of the slaughterhouse policy conflicts and, with it, of the formation of the dietary *dispositif*. This context is marked by a bigger conflict which is established prior to the period of slaughterhouse reforms and is given as a matter of course in the debate on reforms but also further reinforced by

[100] Watts, "The Grande Boucherie, the "Right" to Meat, and the Growth of Paris" cit., p. 20.
[101] Horowitz, "The Politics of Meat Shopping in Antebellum New York City" cit., p. 173.
[102] For example, there were around a hundred private slaughterhouses in Manchester in 1897, 131 in Birmingham (Otter, "Civilizing Slaughter" cit., p. 103), 450 in London in 1898, killing an average of only two cattle per week (MacLachlan, "A Bloody Offal Nuisance" cit., p. 248).

them. This «famous conflict» is the one «between Health and Wealth»[103], or better said, between national health and national wealth. Latour efficiently summarizes it:

> The conflict between health and wealth reached such a breaking point in the mid century that wealth was threatened by bad health. "The consumption of human life as a combustible for the production of wealth" led first in the English cities, then in the continental ones, to a veritable "energy crisis". The men, as everyone said constantly, were of poor quality. It could not go on like that. The cities could not go on being death chambers and cesspools, the poor being wretched, ignorant, bug-ridden, contagious vagabonds. The revival and extension of exploitation (or prosperity, if you prefer) required a better-educated population and clean, airy, rebuilt cities, with drains, fountains, schools, parks, gymnasiums, dispensaries, day nurseries [...] Such an upheaval of cities was seen not as a revolution but as a harmonization, in Stokes's words, between "national health" and "national prosperity and morality". The favorite metaphor of the time, the difference in potential, defined a vast energy source into which all the actors of the period could plug themselves in order to advance their concerns for the next fifty years[104].

Certainly in this upheaval of cities, together with (and sometimes prior to[105]) drains, sewerage, parks, etc., slaughterhouses had a crucial role. As we will see, meat embodies, in a quasi literal sense (because of nutrition science's discourse on proteins and *calories*), that energy crisis; it embodies the conflict between affordable (wealth) and nourishing (health) meat for the population, working classes, and soldiers.

The characterization of this general conflict in terms of health and wealth, proposed by contemporaries and historians, is compatible and is indeed

[103] Bruno Latour, *The Pasteurization of France*, trans. by Alan Sheridan and John Law, Harvard University Press, Cambridge 1993, p. 19.
[104] *ibid.*, p. 18.
[105] This is the case of Moscow's abattoir, for instance. In Moscow, slaughterhouse reforms were opposed because they were considered to be of lesser importance than the implementation of other public services required by the city, such as the sewerage system. As a municipal deputy claimed in 1885: «Considering the absence of public services in the city, the organization of the new slaughterhouse can be compared to the following: we were given a man, sick from eternal dirt, crippled, in rags, uncombed and hungry and were told to put him in order – but instead of cleaning, dressing and treating him, we would only wash his feet, only the toes, and give him shiny shoes. In my opinion, the slaughterhouse is no more than shiny shoes in the matters of urban accomplishment». (Quoted in Mazanik, "'Shiny Shoes' for the City" cit., p. 221).

conditioned on a structural level by capitalist social forms. As we have seen in the previous chapter, this conflict is structured by capital's immanent tendency toward the destruction of labor-power. As we have seen:

> Every form of capitalist society harbours a deep-seated social-reproductive 'crisis tendency' or contradiction: on the one hand, social reproduction is a condition of possibility for sustained capital accumulation; on the other, capitalism's orientation to unlimited accumulation tends to destabilize the very processes of social reproduction on which it relies.
>
> [. . .]
>
> In the liberal competitive capitalism of 19th century [. . .] the imperative of production and [social] reproduction appeared to stand in direct contradiction with each other[106].

In the nineteenth century men, women, and children were equally squeezed into factories and mines, working long hours in unsustainable conditions, women and children being paid a pittance or even nothing. Human health clashes with wealth, leading to that "energy crisis" mentioned by the commentators of the time. This crisis is on two levels: «a crisis of social reproduction among the poor and working classes, whose capacities for sustenance and replenishment were stretched to breaking point»[107], a physical poor quality. On the other hand, it is a moral crisis, or better said, a moral panic among the middle classes, who were scandalized by this situation, by the moral poor quality.

As we have said the mitigation of the systematic blindness of capital towards its own conditions of existence that leads to social crises is due to the state-form and, mostly, to the generativity form. On the side of the state, under the aegis of the (welfare) state, the response to mid-nineteenth-century social-crisis has been substantially concretized in the concertation of two trajectories of conflict.

On the one hand, we find the rise of workers' struggles and the formation of strong trade unions and labor and socialist parties which led to the successful introduction of a legal workday[108], regulations concerning occupational health and safety, as well as a legal minimum wage level.

[106] Nancy Fraser, "Contradictions of Capital and Care", in *New Left Review*, vol. 100 (2016), pp. 99-117, pp. 100, 105.
[107] *ibid*.
[108] See Marx, *Capital I* cit., Chapter 10, pp. 340-411.

> If capital does not encounter resistance in the form of strong trade unions or similar associations, then excessively long working time, unhealthy and dangerous working conditions, and starvation wages will be imposed that prevent the reproduction of labor-power[109].

On the other hand, we find the rise of middle-class reformers and the success of the measures they advocate to remedy the physical and moral poor quality of humans which is problematic for the use of their labor (and military) force in the long term. Since capitalism is a problem for life, such measures cannot be related to anything else but life itself, hence here the hygiene and that great bourgeois movement which is the hygienists' movement arise. As underlined by Coleman, hygienists were concerned with matters that were biological in an expansive and extensive sense:

> The hygienist attended to the essential conditions of existence – *food*; supply and purity of water; *presence and absence of human*, *animal*, and other wastes; the conditions of bodily and mental activity, including above all work, shelter, or protection from the elements – and realized that all of those possessed an underlying economic character; the environment was thereby rendered social in nature. The hygienist also realized that this socioeconomic dimension touched directly upon disease *sensu strictu* [sic][110].

On the side of the generativity form, the answer has been concretized in: formation of the nuclear family, the ideal model of «housewifization»[111] and of separate spheres, the creation of a new, intensified meaning of gender difference, insistence on masculine authority over women and children, especially within the family. In this model the private sphere is, ideally speaking, entirely entrusted to women, the so-called "angels in the home" who manage reproduction autonomously whereas the public sphere of production is entrusted to men[112].

However, this is not the whole story. As we have seen, to stem capital's destructive drives toward labor-power it is necessary also what we have called the anthropological form. This form qualifies that life for which

[109] Heinrich, *Karl Marx's Capital* cit., p. 207.
[110] William Coleman, *Death is a Social Disease: Public Health and Political Economy in Early Industrial France*, University of Wisconsin Press, Madison 1982, p. 202. [emphasis added]
[111] Maria Mies, *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour*, Zed Books, London-New York 1998.
[112] See Fraser, "Contradictions of Capital and Care" cit., pp. 195-108.

capital represents a problem, putting it at risk, as distinctly *human* life. It selects that life which hygienists attended to as *bíos*, as essential conditions of human existence. Or, in other words, it makes it happen that social reproduction is qualified as social reproduction of human population (human labor-power).

It is in the actualization of this form – within this broader conflict – that the hygienist movement introduces the question of the place of meat-slaughterhouse-animals complex (and its reform). The slaughterhouse (the meat-slaughterhouse-animals complex) becomes a "political space" because, to resonate with Rancière's words, it is the subject of argument in a dispute over the social/political, private/public divide. Are meat provisioning and production a private or a public affair? Which is the place for animal bodies (dead or alive)? Is there a change in the ways of doing with the places that the police order allocates? Is there a relocating, a reshaping them?

4.5.2 Knowledges I: meat and nutrition science

Within this opened political space we have to distinguish two key kernels: meat and animals. The importance of meat inside the framework of national health with class concerns, i.e. inside the physical and moral hygiene framework vs. wealth, is easily testified in commentaries of the time, not surprisingly mostly made by hygienists themselves, as well as by heterogeneous men of science.

Just to give some instances of this attitude: already in 1783 *Encyclopédie* the «bread and meat»[113] binomial was established, sanctioning the idea of meat as a necessary food, hence vital food for the whole population. In 1864 a man of science, a zoologist and degeneration theorist, Edwin Lankaster, proclaimed: «We find in the history of man that those races who have partaken of animal food are the *most vigorous*, *most moral*, and most intellectual races of mankind»[114]. Another man of science, a British veterinarian, asserted in 1875: «The consumption of flesh appears to be proportioned to the degree of activity of a people [. . .] Its use is largely on

[113] Quoted in Watts, "The Grande Boucherie, the "Right" to Meat, and the Growth of Paris" cit., p. 23.
[114] Quoted in Otter, "Civilizing Slaughter" cit., p. 89. [emphasis added]

the increase [among the British]»[115]. A popular nineteenth-century saying was "meat is muscle"[116], referring more to human muscles, strength, of the consumers who eat it than to animal muscles that render meat. Meat not only was the source of power for people, but it also made them. As the doctor and hygienist Benjamin Ward Richardson stated in 1893: «the animal substance which to-day may be beef, mutton or pork, may tomorrow be human substance, part and parcel of man, bone of his bone and flesh of his flesh»[117]. Thus, as efficiently summarized by the economist Otto Hausburg, the first director of Berlin's public slaughterhouse, in 1880: «Healthy and inexpensive meat is a question of survival for these [lower] classes, especially for the large number of manual laborers»[118].

The importance of meat, and its increased production and consumption, marked what is today known as nutrition transition[119] in Western Europe and in the diet of Europeans living in North America and Australia. This major dietary change's scope «ranged from eliminating any threat of famine to the founding of highly frequented restaurants and the emergence of *grande cuisine*»[120]. The transition is not a «result of long and slow evolution», rather «traditional diets were revolutionized by economic and social changes that took place in the nineteenth and early-twentieth centuries, changes all associated with the industrial revolution»[121], or better said, with the advent of CSC.

The new modern diet was mainly based on the rise of livestock products – first of all meat, but also milk, cheese, eggs, butter, and fish – and on the decline of the starchy staples (bread and, to a lesser extent, potato) and legumes that have dominated the early-nineteenth-century diet. Considering the total calories available *per capita* per day, in the early nineteenth century the starchy staples accounted for 65-75 percent of total calories,

[115] Quoted in *ibid*.
[116] Brantz, "Animal Bodies, Human Health, and the Reform of Slaughterhouses in Nineteenth-Century Berlin" cit., p. 71.
[117] Quoted in Otter, "Civilizing Slaughter" cit., p. 89.
[118] Quoted in Brantz, "Animal Bodies, Human Health, and the Reform of Slaughterhouses in Nineteenth-Century Berlin" cit., p. 71.
[119] Barry M. Popkin, "Nutritional Patterns and Transitions", in *Population and Development Review* (1993), pp. 138-157.
[120] Smil, "Eating Meat" cit., p. 609.
[121] David Grigg, "The Nutritional Transition in Western Europe", in *Journal of Historical Geography*, vol. 21, no. 3 (1995), p. 247, p. 250.

and also accounted for much of the protein, while livestock products rarely provided 15 percent of all calories[122]. From the late nineteenth century, this role was increasingly played by meat and livestock products, with a consequent decline in bread consumption as well as of protein from plant foods. For instance, just to give some figures, knowing that they disguise huge regional and social variations: in Germany 16 kg of meat were consumed *per capita* per annum in 1816 but this had risen to 51 kg by 1907. French consumption of meat rose from 117 calories *per capita* per day in 1803–1812 to 275 calories in 1894–1904[123]. Certainly, Britain was ahead and faster in this process, earning, already in 1890, the description of «the greatest beef-eating country in the world»[124]. British *per capita* consumption rates roughly tripled during the nineteenth century to a fairly high level of almost 60 kg by the year 1900[125]. Other countries in Europe, especially Mediterranean ones which were slower in the capitalist transition process, looked at the great consumption of meat in the world's most advanced nations and, particularly, in leading Western cities, such as London and Paris, as an example to be reached. Meat was the food of the progress, meat was «the food of the future»[126], as an enthusiastic Spanish journalist wrote in 1881.

What so special about meat? What did make it the food of the future? The answers to these questions are to be found in the mid-nineteenth century process of «nutritionalisation of modern food system», i.e. that «socio-technical process»[127] which rest on nutrition science. It is noteworthy that the very idea of "nutrition transition" and its valuation method based on the discourse around calories, protein, *per capita*, etc., that we have just presented, is in itself a product of such process of nutritionalization. Nutrition science dates from the early to mid-nineteenth century along the lines of physiology, biochemistry and physics and had the effect of

[122] *ibid.*, p. 248.
[123] *ibid.*, p. 254.
[124] Quoted in Otter, "Civilizing Slaughter" cit., p. 89.
[125] Smil, "Eating Meat" cit., p. 610.
[126] Quoted in Guardia *et al.*, "Meat Consumption and Nutrition Transition in Barcelona" cit., p. 205.
[127] Jane Dixon, "From the Imperial to the Empty Calorie: How Nutrition Relations Underpin Food Regime Transitions", in *Agriculture and Human Values*, vol. 26, no. 4 (2009), pp. 321-333, p. 321.

creating dietetics as a separate paramedical profession[128]. As we have seen above, its first area of incubation, experimentation, and application are animal feeds: which started as early as the 1700s with that "rational feeding" we have mentioned, but which nutrition science raises precisely to the rank of scientificity. Traditionally, the German chemist Justus Von Liebig, drawing on the work of Antoine Lavoisier, Francois Magendie, Jons Berzelius, William Prout, Gerrit Mulder and others, is deemed the father of nutrition as biochemical science. His influence and fame – as we have seen, he had a key role also in the development of fertilizers – has been compared with that of Louis Pasteur in the field of microbiology – another central figure of the knowledges' dimension of the *dispositif* whom we will explore below.

> Both men possessed astounding energy, both courted the ruling classes; both smashed the reputations of fellow scientists whose views were holistic and ecological; and both facilitated the supremacy of current conventional science and practice[129].

Not only. It seems plausible to argue that Latour's theory of Pasteur's success, which we will present at length below[130] is also applicable to Liebig's success. Latour, and others in his path[131], argues that bacteriologists' success largely resulted from a process of mutual *translation* and «mutual appropriation» guided by a «common cause»[132]: bacteriologists translated in their own terms the hygienists' precepts and sanitary agenda, addressing topics set by them in order to get financial support for their research; conversely the hygienists, translating in their own terms the doctrine of microbes, found more solid, more structured answers to their nagging needs on diseases (bad-health). Both Liebig and nutrition science in general, for their part, adopted the hygienists' sanitary agenda giving effective and simpler answers to their needs on the feeding of the poor classes (good-

[128] Geoffrey Cannon, "The Rise and Fall of Dietetics and of Nutrition Science, 4000 BCE-2000 CE", in *Public Health Nutrition*, vol. 8, no. 6A (2005), pp. 701-705, p. 702.
[129] *ibid*.
[130] See more on this below, Latour, *The Pasteurization of France* cit., pp. 26-34, 41-49.
[131] Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life*, Harvard University Press, Cambridge 1999; Michael Worboys, *Spreading Germs: Disease Theories and Medical Practice in Britain, 1865-1900*, Cambridge University Press, Cambridge 2000.
[132] Anne Hardy and Mikael Hård, "Common Cause: Public Health and Bacteriology in Germany, 1870–1895", in *East Central Europe*, vol. 40, no. 3 (2013), pp. 319-340, p. 324.

health). Thus, one can see a sort of complementarity between bacteriology and nutrition science in the light of hygiene's needs. This complementarity is testified in the 1884 hygiene exhibition in London, for instance, which brought together «several fairly complex orders of knowledge, constituting in short whatever may render life healthy and even comfortable»[133], as a reporter of the time put it, among which one could find Liebig soup (see below) alongside with pasteurized milk.

Indeed, nutrition science establishes a one-to-one link between food components, previously separated in laboratories, (fat, protein, minerals, water, carbohydrates, salts, etc.) and the physiological functions each of these nutrients performs (increase in muscle mass, protection, etc.). In the context of the war between health and wealth, food has to be selected on the basis of its components; other considerations, like how it appeared or tasted, does not matter. What matters is the «metabolic fate of food»[134].

In this perspective, it is possible to account for the fact that the birth of nutrition science coincided with protein isolation and the discovery of its role as plants, animals, and human growth accelerant by von Liebig in the 1840s, and not, for example, whit carbohydrates isolation. Protein – a brand new term coined in 1838 by the Dutch agricultural chemist Gerrit Mulder – was then identified as the «master nutrient»[135] of the Western diet and food system. Or, better said, animal protein was. Von Liebig, indeed, identified meat and especially muscle tissue which was believed to contain special nutritive qualities, as the richest source of this powerful component. Thus, "eat meat and eat more of it" was the order. As Cannon states:

> It was then that von Liebig and his followers throughout Europe and then the USA blazoned chemistry as the solution for plant, animal and human breeding, and even as containing the secrets of life itself. This was the time when the priorities of chemical nutrition ceased to be conceptual and experimental, and became dictated by social, economic and political factors. *Its prescription was protein of animal origin*. "A vastly more important question than even the victualling of the navy [. . .] is that of victualling of the masses at home", wrote a British commentator. "What is at the moment

[133] Quoted in Latour, *The Pasteurization of France* cit., p. 24.
[134] John Coveney, *Food, Morals, and Meaning: The Pleasure and Anxiety of Eating*, Routledge, London 2006, p. 23.
[135] Cannon, "The Rise and Fall of Dietetics and of Nutrition Science" cit., p. 702.

> deteriorating the lower stratum of the population? – the want of a sufficient supply of nitrogenous food [. . .] why should we not have meat too?"[136].

That the problem was that of social class reproduction, as vividly and at length testified by the aforementioned contemporaries' quotes, not least the one Cannon reported, it is also evident in the vicissitudes of Liebig's Extract of Meat[137]. In his suggestion for a «rational system of diet»[138] outlined in 1847, von Liebig included a formula for producing beef extract. He considered its diffusion to the general public and to the attention of governments as a «matter of conscience»[139] and committed himself to support any viable means of producing beef extract on a commercial scale. Behind these assertions there was the belief that the extract would be a cheaper substitute for meat diet, delivering its goodness to those unable to afford the real thing. Eventually, von Liebig entered the market himself. After rejecting during the 1850s a number of offers from entrepreneurs in Mexico, Australia, and America, he launched the Liebig company officially in the middle 1860s in partnership with George Christian Giebert, a German engineer employed in building roads and railroads in Brazil. The production of the company was based at Frey Bentos on the Uruguay River on twenty-eight thousand acres of land purchased by Giebert, together with cattle. The company «was foundational to the industrialization and growth of enormous cattle industries in Argentina, Uruguay, and southern Brazil»[140].

This also shows that there is no sharp caesura between a time when chemical nutrition was purely interested in experimentation and a time when it was totally co-opted by social, political and economic factors, between a time when it was a «philosophy of life» and a time when it

[136] *ibid.* [emphasis added]. The difference between nitrogenous and nonnitrogenous foods was stressed by von Liebig who assumed that nitorgenous foods and proteins were responsible for building tissue, whereas nonnitrogenous aliments maintained body heat and respiration.
[137] See Mark R. Finlay, "Quackery and Cookery: Justus von Liebig's Extract of Meat and the Theory of Nutrition in the Victorian Age", in *Bulletin of the History of Medicine*, vol. 66, no. 3 (1992), pp. 404-418.
[138] Justus von Liebig, *Researches on the Chemistry of Food*, Taylor and Walton, London 1847, p. XXX.
[139] *ibid.*, p. 111.
[140] Archie Davies, "Unwrapping the OXO Cube: Josué de Castro and the Intellectual History of Metabolism", in *Annals of the American Association of Geographers*, vol. 109, no. 3 (2019), pp. 837-856, p. 839.

became «instrument of the state»[141], as Cannon maintains. Rather, there is a continuum of bourgeois progressivism with social concerns and interests that is common to both areas. Von Liebig himself, as the other men of science previously mentioned, is caught up in this conflict and is, therefore, inserted in its trajectories in which physical and moral hygiene are interwoven and become blurred. He too, with his government-supported laboratory in Giessen, is concerned with the "victualling of the masses".

This discourse is all the more heralded in the putative disciple of von Liebig, the scientist Wilbur O. Atwater – the "Father of American Nutrition" – (he had conducted his postdoctoral research in Germany, under physiologist and dietitian, Carl von Voit a former pupil of Liebig[142]) who together with von Liebig himself strongly marked nutrition science and Western diet.

Just like it had happened in Europe, also in the U.S. until the late 1870s, most food investigation was devoted to analyzing animal rather than human food[143]. Atwater was a pioneer in this field. During his study period in Germany, he acquainted with the so-called Wolff standards for animal feed based on digestible nutrients. He brought them to the attention of American researchers in 1874 and finally the standards were published in 1880[144]. As in animal feeding it is a matter of food input and fat output, in human nutrition it is a matter of food input and labor-power output, health. Atwater makes it very clear when in the 1890s provided scientific backing for the quest of a Democratic Party businessman and lasseiz-faire enthusiast for «breaking through the Malthusian knot and improve the lot of the working classes without resort to labor unions, unnatural increases in wages, or other measures which went against the immutable laws of supply and demand»[145]. A nutritive efficient diet, which was synonyms with higher intakes of protein and fat – that is, cheap cuts of meat and sources of fat

[141] Cannon, "The Rise and Fall of Dietetics and of Nutrition Science" cit., p. 702.
[142] Buford L. Nichols, "Atwater and USDA Nutrition Research and Service: a Prologue of the Past Century", in *The Journal of Nutrition*, vol. 124, no. suppl_9 (1994), 1718S-1727S, p. 1725S.
[143] Harvey Levenstein, "The New England Kitchen and the Origins of Modern American Eating Habits", in *American Quarterly*, vol. 32, no. 4 (1980), pp. 369-386, p. 371.
[144] See Coffey *et al.*, "Review of the Feed Industry from a Historical Perspective and Implications for its Future" cit., p. 2.
[145] Levenstein, "The New England Kitchen and the Origins of Modern American Eating Habits" cit., pp. 371-372.

(often in the form of fatty meat) – was crucial to accomplish this task and well recommended. «It was their greater intake of protein and fat that made American workers more productive than their German counterparts»[146] wrote Atwater in a letter to his democrat partner in business.

Now, the imperative of eating animal protein, of eating meat goes hand in hand with the adoption of the calorie as an effective metric for human energy requirements. The exact amount of protein and, then, the other constituents need to be scientifically quantified. Not surprisingly we find the same main characters in the history of the calories-based diet system[147] which we have encountered so far. We encounter also the same continuum of hygienic concerns shaping the "people nutrition question" and mutual influences between science and public policies.

To quantify human energy needed a modified calorimeter: not to be used to measure the combustive energy of explosives and engines as it had been previously designed to, but to measure individual energy expenditure under controlled conditions. Inserting himself in a long tradition of experimental calorimeters – the first one being designed by Lavoisier –, the aforementioned pupil of Liebig Carl von Voit, with government support, built a calorimeter containing a chamber in which a human could dwell, explicitly designed to account for human requirements of dietary protein for an average working adult eating a "nutritious" meat-based diet. Rubner[148], one of von Voit' students, further developed his mentor's calorimeter to built the world's first self-registering calorimeter and used it on a dog to prove that the first law of thermodynamics applied also to living organisms. In the 1880s he was also the first one to determine energy equivalence among foodstuffs and to outline "standard values" to calculate them; he studied also the nutritional requirements of infants and growing children, as well as the effect of diet on the aging body. Rubner reached worldwide fame by the early twentieth century, after having held positions of prominence and power in the homeland in the previous decade as chair of *hygiene* in Marburg and Berlin. From this position he emerged as

[146] Quoted in *ibid.*, p. 372.
[147] See Nichols, "Atwater and USDA Nutrition Research and Service" cit.
[148] For an analysis of the figure and importance of Max Rubner in the history of nutrition science with a perspective in line with the one here presented, see Corinna Treitel, "Max Rubner and the Biopolitics of Rational Nutrition", in *Central European History*, vol. 41, no. 1 (2008), pp. 1-25.

a passionate advocate of his "rational nutrition" program for mass feeding, as he called it[149] (recall here von Liebig's "rational system of diet").

As we have said, von Voit was Atwater's advisor during his study period in Germany, thus we can now add that Rubner was his fellow postdoctoral and that they worked side by side. Indeed the first U.S. human calorimeter, developed in 1894 by Atwater, was based upon von Voit and Rubner's. Atwater also revised Rubner's caloric intake recommendations defining the energy equivalents of the American Diet. As a scientist employed by the U.S. Department of Agriculture, he strenuously advocated the incorporation of the calorie system within public policy, obtaining great success and deeply influencing U.S. Foreign Policy, «as the calorie was deemed to be an "irrefutable and passionless yardstick"»[150]. The figure of Atwater, bridging two continents, represents the passing of the baton from Germany and Britain to the U.S. and Britain as leading countries in nutrition science in its first period, roughly between 1850 and 1920.

This period is dominated and marked by protein and calorie. By correlating nutrition science with food regimes analysis, Dixon shows the fundamental role that this discipline, since its birth, has played in the process of social reproduction and in fostering the two food regimes. «The social history of nutrition politics reveals that food regimes were in part based on the trade in human energy and health as much as a trade in commodities and capital»[151]. Thus, «food regimes are nutritional regimes»[152]. Form this perspective, the first food regime coincides with the regime of «the master nutrient and the imperial calorie»[153].

> The calorie and protein as quantifiable sources of human energy exchanged for a quantifiable sum of money or money equivalent ('credit') was pivotal to the legitimacy of the 1st Food Regime[154].

[149] *ibid.*, p. 2.
[150] Dixon, "From the Imperial to the Empty Calorie" cit., p. 324.
[151] *ibid*.
[152] *ibid.*, p. 323.
[153] *ibid.*, p. 324.
[154] Dixon, "From the Imperial to the Empty Calorie" cit., p. 325.

4.5.3 Knowledges II: animals and miasma theory

Within the health vs. wealth conflict, the other big problem regarding the formation of the dietary *dispositif* – raised likewise by the hygienists – is that of animal nuisance caused by the slaughterhouses and the entire chain of meat and animal by-products production.

Let's start here too by reporting some instances of quotations of the time on this subject, made by the same group of hygienists and men of science of various kinds that we have seen expressing themselves on the importance of meat. As rightly pointed out by Otter, chronicles on animal nuisance are «rather monotonous [...] Phrases are repeated, recycled, muttered seemingly without needing conscious manipulation». In their repetitiveness they «tell [...] us one thing: the public presence of blood was becoming a problem worth commenting on at length»[155]. If it is true that blood is the substance on which these chronicles most insist, making it possible to speak of real "blood scenes", also fecal matter, guts and manure are the main characters in these reports.

Here it is how an 1847 report described the situation of the slaughterhouses in the immediate neighborhood of that "monster nuisance", as a Times editorial put it[156], which was the Smithfield Market in London:

> There is a slaughter-house [...] The stench is intolerable, arising from the slaughtering of the cattle, and from the removal too, after they are slaughtered, of what I may call the evacuations of the faecal matter, the guts and the blood and the hides of the animals; and when they clean the guts out, the matter is turned out; some of the heavier parts of the manure are preserved to be carted away, but a great deal of it is carried away by the water into the sewers[157].

A butcher liveryman noted in the same 1847:

> The filth, garbage, and impurities of every description generally to be found in slaughter-houses, in almost every stage of decomposition, contribute their quantum of deadly exhalations to the atmosphere of the slaughter-house, and then, after having impregnated the neighbourhood with offensive and

[155] Otter, "Civilizing Slaughter" cit., p. 91.
[156] Quoted in Atkins, "The Urban Blood and Guts Economy" cit., p. 80.
[157] Quoted in *ibid.*, p. 82.

> unwholesome effluvia, are consigned to the sewers, by which they are ultimately conveyed to the Thames, to increase the noxious exhalations from its banks, or, detained in their progress through those notoriously defective channels, to breathe forth at every loophole putrescence and disease![158]

Another deplorable source of animal nuisance was related to cowsheds for urban milk. A commentator reported in 1852:

> Animals, fed upon improper food, give milk scarcely fit for use, their sheds reek with an abominable odour; and not long since the public mind was disgusted with an account of cows kept [. . .], in underground sheds, where, for a long time, they never saw the light of day[159].

This description pales in the fence of the vivid and detailed depiction of a nightman's yard, given by a doctor exploring the East End of London in 1848:

> On two sides of this horrid collection of excremental matter, was a patent manure manufactory. To the right in this yard, was a large accumulation of dung, & c.; but, to the left, there was an extensive layer of a compost of blood, ashes, and nitric acid, which gave out the most horrid, offensive, and disgusting concentration of putrescent odours it has ever been my lot to be the victim of[160].

Finally, we have to mention those offensive trades connected to other animal by-products. As John Simon, the first Medical Officer of Health for the City of London, noted in 1854:

> Tallow-melting, whalebone-boiling, gas-making, and various other chemical proceedings, if not absolutely injurious to life, are nuisances, at least *in the ordinary language of the law*, or are apt to become such. It is the common right of the neighbourhood to breathe an uncontaminated atmosphere; and, with this common right, such nuisances must, in their several degrees, be considered to clash[161].

[158] Quoted in MacLachlan, "A Bloody Offal Nuisance" cit., p. 238.
[159] Quoted in Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London" cit., p. 38.
[160] Quoted in *ibid.*, pp. 26-27.
[161] Quoted in *ibid.*, p. 30. [emphasis added]

However, as one public health official noted still in 1895: «the sounds heard and smells carried from the slaughter-houses, makes them perhaps the greatest of all nuisances in a large city»[162]. Slaughterhouses were identified as a never-ending source of outcries and heart of the diffusion of noisome influences, affecting the sanitary condition of the immediate neighborhood and corrupting the general air of the city.

Now, as it is possible to tell by the aforementioned Simon's words, the concept of nuisance or noisome was a precise and legal conception, referring to something injurious or obnoxious to the community, due to «environmental wrongs»[163]. It had medieval origins and in the middle-ages nuisance was subjected to calculation and resolution in the adversarial setting of the magistrate's court. In the 1830s, 40s and 50s it was elaborated into one of the major themes of legal systems and it was transformed into a principal tool of public health movement[164]. Such transformation welded nuisance and health into a binomial, in the sense that a nuisance came to be viewed as "injurious to *life*" of the community, a hazard to health to the point where the difference between the purely legal meaning and the health meaning, a difference which, for example, remains in Simon's quotation, substantially disappeared. As highlighted by Atkins it was animal nuisance in particular that acted as «a catalyst to both medical and sanitary theories of the environment»[165]. Until the adoption of the first regulation policies against animal nuisance and particularly with the great season of the boards of health in the nineteenth century, European and American cities were full of animals, everywhere. Not only the ones which were driven through the cities on their way to cattle live markets or to private slaughterhouses, but also the ones employed in that *urban animal agriculture* which the cities relied on for transportation, waste management and food supply (especially for the poorer classes).

> Horses were the fastest means of transport. Hogs cleaned up household slop. Chickens scratched at the waste that the pigs left behind. Sheep and goats grazed on the commons, keeping the grasses short. Many urban families

[162] Quoted in Otter, "Civilizing Slaughter" cit., p. 91.
[163] Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London" cit., p. 27.
[164] *ibid.*, p. 28.
[165] Peter Atkins, "Introduction", in Atkins (ed.), *Animal Cities* cit., pp. 1-17, p. 14.

kept or boarded dairy cows for a supply of fresh milk[166].

Implementation of exclusionary processes toward farm animals (poultry were the last farm animals to be banned in the early twentieth century) was often marked by conflicts between various interest groups involved in these operations: city councils and health boards, inhabitants of poor neighborhoods, butchers, owners of piggeries, owners of urban cows and distilleries and their respective Leagues or Corporations. Removal of pigs from the urban environment, in particular, proved challenging in most cities, not only because of the overt opposition to reforms by those groups who had an interest in keeping the *status quo*, but also because, in the absence of complementary introduction of a modern system of household waste disposal (and in the best case scenarios of urban poor feeding programs, too), the cities still needed those animals and their informal sanitation system. This replacement, enabled by industrial improvements, made pigs disappear from the cities and secluded them in industrial farms at the peripheries[167].

Urban pigs and milk cows also disappeared because of hygienist's opposition to the integrated system of piggeries, cowsheds and distilleries in the cities. This system represented a great nuisance because it created such outrages against decency as "drunken pigs". Thus, usually after long and fierce debates, this system eventually succumbed by means of municipal acts. This is particularly true where there was organized and strong opposition to the consumption of alcoholic beverages, as in North America. The temperance movement had in many cases a key role in advocacy against urban animals. For example, in the 1840s in New York, the debate over milk and the attack on the dairies were initially ignited not from efforts to reform urban health but from the temperance movement that attributed contaminated milk to the distillery cows' alcoholic diet alone[168].

To understand the reason for the link between animals and health we can start once again by looking at the aforementioned quotations. What is

[166] Brinkley and Vitiello, "From Farm to Nuisance" cit., p. 113.
[167] See for a comparative analysis of the cities of Baltimore, Boston, Philadelphia, and New York *ibid.* On urban farming (milk cows and pigs) in London and the U.K. see also Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London" cit., pp. 38-46.
[168] Brinkley and Vitiello, "From Farm to Nuisance" cit., pp. 123-125.

evoked insistently and with more disgust and disapproval is odor. We find: "intolerable stench", "deadly exhalations", "offensive and unwholesome effluvia", "abominable odour", "the most horrid, offensive, and disgusting concentration of putrescent odours". In one word, we find smell. Blood, guts and manure are the worst nuisances because they stink the most, because of their bad smell and not, say, for their color, flavor, or consistency. For example, in London: «the Metropolis Buildings Act (1844) defined offensive trades mainly with smell in mind: blood boilers, bone boilers, fellmongers, slaughterers of cattle, sheep, or horses, soap boilers, tallow melters, and tripe boilers»[169].

What so special about smell? What did make it dangerous? The answer is to be found in the process of "miasmification" which affected medicine from the late eighteenth century till at least the 1890s with the triumph of Pasteur's and Koch's discoveries on microbiology. It is on the basis of miasma theory of disease that, for instance, Edwin Chadwick, the prominent English sanitary and social reformer author of the pivotal *Report on the Sanatory Condition of the Labouring Population of Great Britain* (1842) which would have led to the first Public Health Act in 1848, can affirm that «all smell is disease»[170]. Thus, it is miasma theory the knowledge within which the very concept of animal nuisance acquires meaning (and its horribleness). To get a sense of how highly hazardous were urban animals and their by-products in this framework we can quote from a key textbook of the day, the *Copland's Dictionary of Practical Medicine* (1834-1856).

> Certain [. . .] causes of disease, of no mean importance, particularly marsh miasmata, and noxious animal exhalations, act directly upon the organic nerves of the lungs, and on the blood itself, through the medium of absorption.
>
> The putrefaction of animal substances has been supposed by many to occasion disease in those who come within the sphere of the exhalations thus produced, and even to generate a malady which has become infectious, and has, partly thereby, and partly from other concurring causes, prevailed to an epidemic, or even pestilential, extent. It is not, however, merely dead animal bodies, or considerable collections of putrid matter, but also heaps of filth exposed in the streets, or animal excretions and exuviae, subjected to

[169] Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London" cit., p. 29.
[170] Quoted in MacLachlan, "A Bloody Offal Nuisance" cit., p. 240.

> a warm and stagnant air, and neglect of domestic and personal cleanliness, that are thus injurious. These latter may be less energetic agents than the foregoing; but they more frequently exist, and are more common concurrent causes[171].

Although such explanations may appear vague and non-specialist to us today, to the eyes – or perhaps it would be better to say to the nose – of a doctor or a public health officer/hygienist of the time, they speak the language of science with all its specialist vocabulary: it is the language of aerist theory based on the sense of smell, whose study on miasma is in the nineteenth century the main branch.

> The nose, as the vanguard of the sense of taste, warns us against poisonous substances. Even more important, the sense of smell locates hidden dangers in the atmosphere. Its capacity to test the properties of air is unmatched. The increased importance attributed to the phenomenon of air by chemistry and medical theories of infection put a brake on the declining attention to the sense of smell. The nose anticipates dangers; it recognizes from a distance both harmful mold and the presence of miasmas. It is repelled by what is in a state of decomposition. Increased recognition of the importance of the air led to increased acknowledgment of the importance of the sense of smell as an instrument of vigilance. That vigilance produced the guidelines for the reordering of space when the rise of modern chemistry made that reordering unavoidable[172]

As shown by French historian Alain Corbin, in that which is the most complete historical-social investigation on olfactory theories and smell in the eighteenth and nineteenth centuries, odor as a medical concept, olfaction as medicine's privileged sense, and nose as medical precision instrument have an ancient origin. They were rooted in the fifth and fourth centuries B.C. in the work of Hippocrates and his disciples at Kos which had underlined the influence of air on fetal development, the formation of temperaments, passions and language and stressed the virtues of perfumes against diseases and plague[173]. The belief in some Hippocrates and ancient

[171] Quoted in Atkins, "Animal Wastes and Nuisances in Nineteenth-Century London" cit., p. 23.
[172] Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination*, trans. by Miriam L. Kochan *et al.*, Berg Publishers, Oxford 1986, p. 7.
[173] *ibid.*, p. 13, p. 17.

medicine principles (Galenus, Crito)[174] spanned the centuries, enriching itself with other knowledge – in particular from the mechanistic tradition – until it formed the set of medical propositions on which in the latter years of the eighteenth century were rooted the neo-Hippocratic medicine, epidemiology, and the "pneumatopathological" interest. These were the disciplines on which – more preponderantly in the nineteenth century with the public health reforms – the «atmospheric vigilance», also called «olfactory vigilance», was based. The fundamental principle of aerist theory asserted that:

> As the physical properties of air acted collectively and individually, so the composition of its contents governed the health of organisms. Sulfur, stinking emanations, and noxious vapors threatened its elasticity and posed threats of asphyxia; metallic acid salts coagulated the blood of the capillary vessels; emanations and miasmas infected the air, incubated epidemics[175].

Since the 1770s the atmospheric vigilance received a great boost and further development of its olfactory component thanks to the work of chemists, committed in an effort of translating it into a scientific language completely based on smell. The masterpiece of this science called osphresiology (literally, the science of smells) – started with Linneaus – was Dr. Hippolyte Cloquet's *Traite des odeurs, du sens et des organes de l'olfaction* published in 1821, updated in 1845 and finally enlarged in 1885[176], just to have an idea of the deep and long-lasting influences in medical science of smell. These scientists strove to develop a nosely-based lexicon to define the mixtures and to identify the stages of putrefaction with the objective of eliminating "the vagueness of the putrid" and producing a full comprehension of the mechanisms of infection. «Air was no longer studied as the area of generation or of the burgeoning of vitality, but as the laboratory of decomposition»[177]. «Henceforth this vigilance had manifold aims: to detect irrespirable gases and particularly "airs," and to discern and describe hitherto imperceptible viruses, miasmas, and poisons»[178]. It had to be a 360° grade vigilance, so to say. The task, in itself worthy of Sisyphus, was

[174] *ibid.*, p. 62.
[175] *ibid.*, p. 13.
[176] See *ibid.*, p. 36.
[177] *ibid.*, p. 16.
[178] *ibid.*, pp. 14-15.

aggravated by a confused, tricky and ambiguous classification, except for few unquestionable leading elements: fixed air, sulfuric acid, inflammable air, volatile alkali, and liver of sulfur. Fixed air was the central element in putrefaction theory since the studies by the German physician Johann Joachim Becher in the second half of the seventeenth century, together with humidity and the process of lysis.

The idea was that decomposition was an internal continuous movement in perpetual conflict with the principle of the natural cohesion of the parts, represented precisely by fixed air, which was transmitted by blood. A fetid odor together with humidity emanated from decomposing or diseased parts or bodies. It was the odor of fixed air, in search of new combinations. If accidentally someone inhaled this putrid miasmas, his/her equilibrium of internal forces (decomposition-cohesion) was altered and compromised in favour of decomposition, putrefaction, making the spread of plagues, fevers, gangrene, syphilis, scurvy possible. Thus, in order to prevent the escape of fixed air, among other advises, aromatics acquired the leading role, thanks to their volatility and powers of penetration,[179].

If it was believed that blood transmitted fixed air – being, because of this, the most prominently putrid animal remains – it is easy to understand why urban slaughterhouses had to be under "special surveillance" within the smellscape of the city, the reasons why they were considered "the greatest of all nuisances". As Corbin puts it vividly:

> The urban slaughterhouse was an amalgam of stenches. In butchers' narrow courtyards odors of dung, fresh refuse, and organic remains combined with foul-smelling gases escaping from intestines. Blood trickled out in the open air, ran down the streets, coated the paving stones with brownish glazes, and decomposed in the gaps [. . .] The malodorous vapors that impregnated roadways and traders' stalls were some of the deadliest and the most revolting; they "make the whole body susceptible to putridity". Often the stifling odors of melting tallow added to this foul-smelling potpourri[180].

Now, the revolution introduced by the works of Lavoisier in chemistry not only discredited aerist theories but also favored physico-chemicals analyses rather than sensory impressions, challenging the scientific role

[179] See *ibid.*, pp. 16-34.
[180] *ibid.*, p. 31.

of the nose and proving wrong the equation between stench and bad air. Nevertheless, the scientific discourse around miasma had not been affected in the slightest by such a revolution or by the shortcomings of osphresiology. Therefore, the olfactory experience of a repulsive smell fully maintained its value as miasma detector, at least until bacteriology's discoveries undermined the miasma theory. Miasma, indeed, was not air, rather «a substance added to air». As a physician made clear in 1838: «The dangerous thing [. . .] chemistry has not taught us about; but our senses are more discerning than chemistry; they clearly demonstrate to us the presence of noxious putrid matter in air where men have stayed for a long period»[181].

Therefore, the definition of the healthy and the unhealthy kept on being rooted in olfaction and in a deeper and more systematic way than ever before, coming to take on the role of undisputed leader of new public health reforms (until Pasteur's theories success). The renewed and reinvigorated prestige of odors, the miasmification of the medicine mentioned above, was done through the work of the hygienists' movement within the framework of something hitherto unprecedented: a coherent project of social order. It was only with the hygienists that the *olfactory* vigilance, the reading of city's olfactory texture oriented to the localization of its miasmatic networks through which the epidemic spreads, took on the value of *social* vigilance, becoming a reading of city's social texture oriented to the localization of infectious/infesting social groups in order to purify, i.e. deodorize, them. Such social reading of odor, which was actually a *writing* of social odor, inscribed, through the ink of health reforms, a neat dichotomy of the stench: on the one side, the «deodorized bourgeoisie» and on the other «the foul-smelling masses»[182].

> Olfaction was caught up in the refinement of nineteenth-century practices and divisions. The subtle interplay of individual, familial, and social atmospheres helped to order relationships, governed repulsions and affinities, sanctioned seduction, arranged lovers' pleasures, and at the same time facilitated the new demarcation of social space[183].

[181] Quoted in *ibid.*, pp. 113-114.
[182] *ibid.*, p. 55.
[183] *ibid.*, p. 141.

Such attitude represented a break with the fascination of the late eighteenth-century vitalist thought for body odors that enhanced strong and animal odors by virtue of their benefits on physical-sexual performance and that connected them with diet, climate, profession and temperament[184]. And it was also a move away from neo-hippocratic analysis based on the influence of topography, nature of the soil, climate, direction of winds... Now the attention was almost obsessively directed on the "stench of the poor" or the "secretion of poverty"[185]. This stench, according to medical science, was an animal one, i.e. an excremental one, as it said with more insistence in the aftermath of the 1830s cholera pandemics. Not surprisingly, thus, knackers, gut dressers, butchers, cattle drivers and urban cowkeepers, along with sewermen, drain cleaners and workers in refuse dumps, were at the top of the list of the stinkers (in its double meaning: olfactory and moral). In a framework where "all smell is disease", through the writing of social odors, «doctors and sociologists had just detected that a type of population existed which contributed to epidemic[s]: the type that wallowed in its fetid mire»[186].

Now, the concept of animal nuisance has been enriched by our analysis with its social significance, its class content. «The unpleasant odor of the proletariat remained a stereotype for at least a quarter of a century, until the attempts at moralization, familialization, instruction, and integration of the masses began to bear fruit»[187]. Animals' smell and their miasmas, emanated from that inextricable olfactive complex[188] composed of animal carcasses, blood, dung in the streets, skin, hair, clothes, the sweat of slaughtermen, butchers, etc. are no longer acceptable in the hygienist

[184] «Strong-smelling effluvia were a sign of intense animalization and evidence of the vigor of the individual and the race. Thus it was discovered that very ancient therapeutic practices had a scientific basis. The cure for any ailment arising from insufficient animalization was traditionally sought in stables containing young animals» (*ibid.*, p. 37). For more detail see *ibid.*, pp. 25-43. An interesting example of this change concerns stables. In the vitalist conception, the warm air in the barn, soaked in animal odors and humors, is beneficial for both animals and humans. Cows could maximize the milk yield and men could be reinvigorated. For this reason, stables were almost windowless, non-ventilated and in a perpetual semi-shade. In the framework of miasma theory this stagnant and fetid air come to be regarded as very unhealthy.

[185] See *ibid.*, pp. 142–161.

[186] *ibid.*, p. 144.

[187] *ibid.*, p. 148.

[188] «Perception of the danger from "social emanations" brought distrust of the putrid crowd, of people and animals combined» (*ibid.*, p. 47).

dream of a deodorized=healthy city, in the utopian healthy city of the future *Hygeia*. *Hygeia* is a very detailed utopia in an address to the Health Department of the Social Science Congress describing the healthy city of the future. In Hygeia there are: pollution controls on fires; factories out of town; railroads and sewage underground; roads all paved; no rooms underground, publicly supervised slaughterhouses; model hospital; public street cleaning; burial without embalming or a casket; public laundries under state supervision; low houses; no carpets; roof gardens. In Hygeia no one smokes or drinks alcohol and everyone exercises.

It is referring to this concept of animal nuisance, intrinsically connected with miasmification of medicine and not to a vague sense of repulsion for contact with animals or cruelty against animals *per se*, that it is possible to account for the efforts from the mid-nineteenth century onward of hygienists toward slaughterhouse reforms. Also, the importance of sight and of the conceptual pair of visibility/concealment, which many critical animal studies scholars[189] often refer to in order to explain the change in social attitude toward animals and the creation of modern slaughterhouses, is significantly reduced if considered from this perspective. Within this knowledge regime, the blood flowing in the streets or the presence of live animals in markets with their excrements and secretions is not so much repellent to the sight, and therefore to be hidden, as to the sense of smell, and therefore to be deodorized through centralization, given the harmful consequences at the level of public hygiene. The question of sight, instead, belongs more to the discursive horizon of the societies against cruelty to animals and humanitarians[190]. This discourse, as we shall see later, insists on the moral degradation of humans, especially children, caused by the spectacle of violence and therefore advocate for its concealment.

[189] See for example Fitzgerald and Taylor, "The Cultural Hegemony of Meat and the Animal Industrial Complex" cit.; Twine, "Revealing the 'Animal-Industrial Complex' – A Concept and Method for Critical Animal Studies" cit.
[190] See Hilda Kean, *Animal Rights: Political and Social Change in Britain Since 1800*, Reaktion Books, London 1998, pp. 39-70.

4.5.4 Knowledges III: meat, animals and bacteriology

In a period of raging epizootics and panzootics[191] as well as zoonoses whit endemic and epidemic trends, in a period in which the associations between animals and urban life were intimate and close, as in the nineteenth century, the idea that there could be connections between the health of animals and that of the humans who depended on them for food, labor or companionship enjoyed neither special attention nor credibility[192]. As historian Anne Hardy highlights:

> Although animal disease became a concern of central government following the disastrous epidemic of cattle plague of 1865-66, it was not until the very end of the century with the spread of new bacteriology that any significant attention began to be paid to possible direct connections between human and animal disease[193].

As we have seen, what mattered – as the trigger for claiming health reforms and laws dealing with animals (slaughterhouse reforms, meat inspection laws, cattle disease acts) – were hygienist concerns about, on the one hand, diet, anchored to nutrition science and, on the other hand, animal nuisance, anchored to the smell-based theory of miasmas and decomposition. Therefore, within this framework of knowledge the chief risks for human health coming from animals could be controlled with the disposal of animal carcasses and manure and the removal of animals from urban streets thanks to the centralization of meat production's phases.

The problem related to meat poisoning[194] found its explanation inside the miasmatic scientific horizon too. By the nineteenth century, two kinds

[191] Clive A. Spinage, *Cattle Plague: a History*, Springer Science & Business Media, Berlin 2003.
[192] See Anne Hardy, "Animals, Disease, and Man: Making Connections", in *Perspectives in Biology and Medicine*, vol. 46, no. 2 (2003), pp. 200-215.
[193] Anne Hardy, "Pioneers in the Victorian Provinces: Veterinarians, Public Health and the Urban Animal Economy", in *Urban History*, vol. 29, no. 3 (2002), pp. 372-387, p. 374.
[194] «It was not until the later 1880s that the generic term "food poisoning" emerged: before this, and still occasionally for decades thereafter, episodes were usually described by the precise item of food involved: "cheese poisoning", "meat poisoning", "pork-pie poisoning". It was only when the central medical department began collecting outbreaks in the 1880s that the term food poisoning came into use, initially in inverted commas. The 1880s was the key decade in which the concept of bacterial food poisoning displaced that of ptomaine poisoning, among interested researchers and public health administrators» (Hardy, "Food, Hygiene, and the Laboratory" cit., pp. 294-295).

of diseases associated with foodstuffs were recognized: the one linked with adulteration and the second one with foods ordinarily not provoking disease and apparently incapable of adulteration, such as meat and fish. In these cases, the decomposition theory could accommodate even foods that appeared sound. In fact, the responsibility of the illness was ascribed to chemical poisons or to putrefactive alkaloids or toxins – known as "ptomaines" – released in the process of putrefaction without affecting the texture and the taste of the food item. In these cases, the usual sanitary inspections, consisting basically in seizing and destroying consignments of obviously diseased decayed (i.e. smelly) meat, presented a serious problem of identification. In addition, the consumption of meat from diseased animals was lamented because the flesh of sick animals was thought to decay more rapidly and not on the ground of possible transmission of the disease[195]. The very idea of transmission, of contagion of disease, was not popular among the scientific community, making the idea of animal-human contagion, in general and especially through the consumption of infected meat, science-fiction[196].

Strictly speaking, miasma theory is an anticontagionist point of view with regard to the etiology of diseases and it supports the traditional essentialist theory of "morbid spontaneity", i.e. the spontaneous rise of disease conditions in the body itself[197]. As the French clinician Hermann Pidoux, a

[195] Hardy, "Pioneers in the Victorian Provinces" cit.

[196] «At the root of this entrenched indifference to the potential for the transfer of disease between man and animals lies the opaque nature of that transfer itself. The major infectious scourges of the animal kingdom – distemper in dogs, cattle plague and foot-and-mouth, sheep rot, liver fluke, bovine pleuropneumonia and swine fever – do not apparently transmit to man. Salmonella and other food-poisoning organisms of animal origin are usually transmitted in apparently wholesome foodstuffs: it was only with the advent of the public health laboratory after 1918 that they began to be commonly related to the ingestion of contaminated foodstuffs. Tuberculosis, tapeworms and trichinosis take long enough to develop that the pathway of causation can be obscure. Of the animal diseases that were known by the Victorians to be transmissible, glanders, rabies and anthrax were all of relatively rare occurrence in man. Moreover, glanders and rabies were transmitted by inoculation – by the entry of infected pus through wounds and abrasions on the skin, by the saliva in the bite of a rabid dog. Anthrax was transmitted by the handling of infected hides and hair, and only very rarely through the consumption of infected meat. These three, it could be argued, were essentially accidental transmissions, which could be avoided by due care and attention. In any general context, they did not represent a large threat to human public health» (*ibid.*, p. 375).

[197] David S. Barnes, *The Making of a Social Disease: Tuberculosis in Nineteenth-Century France*, University of California Press, Berkeley 1995, p. 43.

champion of anticontagionism in the contagion debate over tuberculosis developed in France around 1865, put it: «When I speak of spontaneity [. . .] I am considering the organism in its milieu, that is [. . .] surrounded by agents of hygiene, [. . .] by stimuli that are sufficient or insufficient, regular or irregular, favorable or harmful, healthy or unhealthy»[198]. He identified three categories of influencing causes: "appreciable external causes" (e.g. «ignorance, overwork, malnutrition, unsanitary housing, [and] deprivation of all sorts»), "appreciable internal or pathological causes" (e.g. «laziness, habits of luxury and flabbiness, excess at table, [and] the torment of ambition»), "constitutional predisposition"[199]. Thus, anticontagionism is not incompatible with the influence of external causes and it was these external causes that it sought to harshly battle through collective action, intercepting at this point hygienists' concerns. Pidoux asserted: «we partisans of the spontaneous degeneration of the organism under the influence of [various] causes that we are *seeking out everywhere*, in order to combat the disease at its roots»[200].

However, it would be a mistake to presume that intellectual divisions, ideological and political matrixes were clear cut: the boundaries were blurred and dubious. Contagionism and anticontagionism sometimes were seen as coexisting theories and the same categories of contagions were ambiguous; for instance, in early nineteenth-century medical textbooks it was possible to find descriptions of "contagious miasms"[201].

What was a matter of fact, as underlined by Latour, was that diseases had a «strange and erratic behavior».

> Disease appeared sometimes here, sometimes there; sometimes at one season, sometimes at another; sometimes responding to a remedy, sometimes spreading, only to disappear. [. . .] Sometimes cholera passes, sometimes not; sometimes typhus survives, sometimes not. Indeed, the doctrine of "morbid spontaneity" was the only really credible one[202].

The fundamental problem of the hygienists was this constant incon-

[198] Quoted in *ibid*.
[199] See Barnes, *The Making of a Social Disease* cit., p. 44.
[200] Quoted in *ibid*., p. 46. [emphasis added]
[201] See Dorothy Porter, *Health, Civilization and the State: a History of Public Health from Ancient to Modern Times*, Routledge, London 2005, pp. 61-47 for more detail on nineteenth-century public health in Europe and the United States.
[202] Latour, *The Pasteurization of France* cit., p. 21, 32.

stancy, this *variation*, this unpredictability of diseases which could be caused by almost everything and thus which had to be fought only acting everywhere and on everything at once, acting on «the heavens, weather, morals, climate, appetites, moods, degrees of wealth, and fortune»[203], as Latour puts it. This variability and the consequent combat plans and peculiar style of hygiene – «accumulation of advice, precautions, recipes, opinions, statistics, remedies, regulations, anecdotes, case studies»[204] on everything – immediately resonates with the method of "seeking out everywhere" inherent in anticontagionism. «At the time – that is, before Pasteur had made himself necessary to the hygienists – one thing was certain: the doctrine of contagiousness was inadequate to fulfill the hygienists' goals»[205].

Thus, certainly, as mentioned above, the formation of the dietary *dispositif* from the point of view of the dimension of the knowledges of which the hygienist movement becomes the spokesman is anchored primarily to the miasmatic theory. As Latour points out about the relationship between hygienists and Pasteur's new bacteriology (but the same could be said for the *Hygieniker* and Koch in Germany[206]):

> Where would the hygienist movement have gone without Pasteur and his followers? In its own direction. Without the microbe, without vaccine, even without the doctrine of contagion or the variation in virulence, everything that was done could have been done: cleaning up the towns; digging drains; demanding running water, light, air, and heat[207].

Building mechanized and centralized slaughterhouses, too.

> What the hygienist movement did with Pasteur it would have done anyway without him. It would have made the environment healthier. The vague words "contagion," "miasma," and even "dirt" were enough to put Europe in a state of siege, and it defended itself by cordons sanitaires against the infectious diseases. Of course, terrible diseases got through the cordons, but sometimes there were victories, and that was no small achievement[208].

[203] *ibid.*, pp. 63-64.
[204] *ibid.*, p. 20.
[205] *ibid.*, p. 22.
[206] See Hardy and Hård, "Common Cause" cit.
[207] Latour, *The Pasteurization of France* cit., p. 23.
[208] *ibid.*, p. 25.

However, anticontaginist miasmatic framework supporting the doctrine of morbid spontaneity had a practical problem of great importance which leads us to have to consider also bacteriology as a reference knowledge of the dietary *dispositif*, even if of a later phase. Indeed:

> [Miasmatic doctrine] encouraged skepticism. Steps could be taken, of course, but against what? Against everything at once, but with no certainty of success. It was difficult to arouse enthusiasm and sustain confidence in programs of reform and sanitation that all rested on this inconstant constant: "Confronted by this periodically recurring fatality, we remained powerless, unarmed, and, as the poet has it, 'weary of all, even of hope"'[209].

Such situation of uncertainty, of skepticism – heightened by the continuous raging of illnesses that were thus attributed to the failures of this method – took on particular significance and became particularly critical, especially when it came to investing large sums of money in the implementation of health measures. The situation became even more thorny and turned into a bitter ground for political debate and conflict where the reforms advocated by the hygienists were detrimental to the interests of established and powerful groups.

This is the case with slaughterhouses, as we shall see in detail below in the section on *dispositif*'s dimension of politics. «The urban meat trade and the wider national agricultural system were too powerful for any minority medical opinion to achieve effective influence»[210]. The uncertainty inherent in the miasmatic framework, in connection with other factors and depending on specific contexts, thus explains the delay in the adoption and/or implementation of slaughterhouse reforms. An exemplar case is the U.K. and London in particular. Not always the presence of smell and, thus, miasma was consistent with epidemiological observations nor it was always possible to define where a certain animal nuisance came from, whether from that specific premises or another. As a sanitary report on the causes of sickness and mortality affecting the poor of London's east end in 1838 stated:

> Dwellings thickly crowded with inhabitants stand all around the slaughterhouses, yet here, where the materials for the production of the worst forms

[209] *ibid.*, p. 33.
[210] Hardy, "Pioneers in the Victorian Provinces" cit., p. 377.

> of fever are most abundant, scarcely a case has occurred, even during the present epidemic. On the other hand, in the passages, courts, and alleys, on the very opposite side of the street from the houses of which there are no drains into the common sewer, fever of a fatal character has been exceedingly prevalent[211].

Given this situation, as Latour again points out:

> What the microbe and the transformation of microbiology into a *complete* science did was to make long-term plans of sanitization *indisputable*. They offered, literally, a real guarantee of municipal investments. How could the hygienists convince city councils to throw themselves, for instance, into a public drainage program if there were still any dispute "in high places" as to its harmlessness? However, as soon as the scientific argument was closed, they could guarantee the municipalities a good return on their investments[212].

Thus, it was in the interest of the hygienists to settle the scientific dispute, hence their enthusiastic and almost fideistic adoption-through-translation of bacteriology discoveries in laboratories[213].

The new bacteriology was grafted onto the horizon of meaning of morbid spontaneity – replacing the miasmatic doctrine as to the etiology of disease – through a process of translation. In fact, the problem and the request of the period were «to reconcile contagions and morbid spontaneity». What had to be explained was «not contagion but *variation* in contagiousness in terms of environmental circumstances»[214]. Indeed:

> Contagionism as a general doctrine was powerless, but the Ariadne's thread, making it possible to connect a ship, a train, a particular topography, a

[211] Quoted in MacLachlan, "A Bloody Offal Nuisance" cit., p. 238.
[212] Latour, *The Pasteurization of France* cit., p. 54.
[213] This is Latour's reconstruction of the general process of translation between the hygienists and the Pasteurians: «"We want to sanitize," say the hygienists, expressing in their own way the forces of the period and the conflicts between wealth and health. "All your good intentions are diverted, confused, parasitized," say their enemies. "This parasite that diverts and confuses our wishes, we see it and reveal it, we make it speak and tame it," say the Pasteurians. "If we adopt what the Pasteurians say, seizing the parasite with its hand in the bag, we can then go as far as we wish," say the hygienists. "Nothing will be able to divert our projects and weaken our programs of sanitization." In spreading the notion of the Pasteurians as revealers of microbes, the hygienists, who claimed to be the legislators of health, spread themselves» (*ibid.*, p. 41).
[214] *ibid.*, p. 64.

> system of water supply, brought together both the traditional investigation and the new agent. Before, *everything* had to be taken into account, but in a disconnected fashion; now the hygienist could also take everything into account, but *in the order* laid down by the microbe's performances. It is easy to imagine the extraordinary enthusiasm of all the hygienists called upon to discover the traces of an enemy that seemed so erratic as to summon up the whole explanation of morbid spontaneity. Without abandoning anything of the past, they were becoming stronger[215].

In the end «what were once miasmas, contagions, epidemic centers, spontaneous diseases, pathogenic terrains, by a series of new tests, were to become visible and vulnerable microorganisms»[216]. The microscope – the vision – replaced the nose – the sense of smell – as privileged instrument of medicine[217]. The laboratory took the place of the smell-cartography of the city (with its heavy social bearing). It was not a complete and immediate replacement, though. As Corbin notes:

> The alliance between germs and dirtiness – now identified with filth and dust – remained unchallenged. There were fifty to sixty times more microbes in the poor man's dwelling than in air from the most evil-smelling sewer, declared Marie-Davy in 1882. Stench was no longer morbific, but it signaled the presence of disease. The masses had lost their monopoly on infection, but they remained the greatest threat[218].

Thus, the definition of bacteriology alleviated *in part* the contradiction between health and wealth «by shifting the interest from "sick paupers" to "dangerous microorganisms"»[219].

Within the framework of this knowledge, the living animals and meat (the latter here considered in relation to bad-health, illnesses which it can lead to and not as a source of energy as in the perspective of nutrition) are

[215] *ibid.*, p. 45.
[216] *ibid.*, p. 82.
[217] «The macrocosm of the town, sanitized by the hygienists, and the microcosm of the culture of the bacilli, sanitized by the Pasteurians [. . .] All the great macroscopic problems of hygiene, it was believed, had been found to be solvable by the Pasteurians on the small scale of the laboratory: the same went for the main disinfectants, the safety of the Paris drains, the harmlessness of the sewage farm at Gennevilliers, problems of quarantine. In each case, thanks to this identification of the macro- and microcosm, Pasteur's laboratory was expected to provide the final opinion that would settle the matter» (*ibid.*, p. 67).
[218] Corbin, *The Foul and the Fragrant* cit., p. 226.
[219] Latour, *The Pasteurization of France* cit., p. 254.

no longer constituted as noisome bodies (or pieces of bodies). The bodies of animals, one might say, are no longer rarefied in the air in the form of smell to be detected, rather they are "micro-corporealized" in the microorganism inhabiting them[220]. Blood and intestines are not a health hazard because they stink, but because they contain microbes. Animals and meat are unified by this knowledge as subjects of inspection (before and post-slaughter). Inspections were advocated at least since the 1850s, especially by the emerging group of the veterinarians[221] which campaigned for greater involvement in the business of public health and it became more and more fundamental as new human-animal transmissible diseases and the relative bacilli were discovered (trichinosis, pleuro-pneumonia, foot-and-mouth disease, anthrax, chicken cholera, salmonella, swine tuberculosis, bovine tuberculosis) establishing itself, especially since the 1880s after Koch's discovery of the tubercle bacillus in 1882.

The ever-growing "bacteriologyzation" of medicine (and veterinary medicine), which made inspection procedures to be indispensable, even if their widespread and thorough implementation was long to come and very much questioned[222], was another push – originated within the knowledge dimension of the *dispositif* – for reforms of slaughterhouses toward their centralization. Indeed, supervision and daily inspections both of animals on the hoof and meat were almost impossible where the slaughter trade was decentralized. An exemplar case in this sense is the pathways the reform

[220] The treatise that lays the foundations of parasitology, written by the Italian scientist and poet Francesco Redi in 1684 was significantly entitled *Osservazioni intorno agli animali viventi che si trovano negli animali viventi* (*Observations on Living Animals, that are in Living Animals*).

[221] See Hardy, "Pioneers in the Victorian Provinces" cit.

[222] «The dangers of diseased meat, or meat from diseased animals, were not suddenly regarded as serious just because of the new scientific understanding of tuberculosis. Science neither initiated the matter nor settled it. The chain from beasts diagnosed with tuberculosis to meat on a domestic table was a long one. The links were as contested in the era of bacteriology as they had been in the 1860s when pleuropneumonia was the chief cause of anxiety. Science moved understanding on, but questions of the transference of disease from animals to the humans that consumed them, and the unpredictability of the consequences of eating meat from livestock diseased in one degree or another, remained [. . .] A complex web of changing sanitary, veterinary, municipal and commercial contests, conducted through professional and personal conflicts and rivalries, fuelled a public debate about the dangers of unwholesome food and turned it into a major political issue» (Paul Laxton, "This Nefarious Traffic: Livestock and Public Health in Mid-Victorian Edinburgh", in Atkins (ed.), *Animal Cities* cit., pp. 107-172, p. 109).

followed in Berlin[223]. After the explanation of the causes of trichinosis in the 1860s and the consequent diffusion of trichinosis scares, medical experts and hygienists immediately called for state intervention in meat inspections. However, the reform remained stuck in public debates until 1881 when, in the end, the new Berlin's Central-Viehhof opened.

The 1880s, indeed, saw the beginning of the hegemony of bacteriology, this new knowledge seeking to be indisputable, and the hygienists thus were better armed to win the debates (thanks also to favorable circumstances outside the dimension of knowledges). Newly built slaughterhouses, as we have seen also in the case of the abattoirs in Mexico City and Moscow, are endowed with all the takings of this new scientific dimension and are imbued with the unprecedented prestige it enjoys (because of the process we have illustrated following Latour). Here we find, at least ideally speaking, the figure of the veterinarian as the exclusive holder of this knowledge and therefore the highest authority in the field; the library and the auditorium where this category of expert professionals could get (in)formed on the discoveries of new bacilli and diseases; and above all the laboratory, the physical symbol of bacteriology. Why the laboratory?

> All the Pasteurian [bacteriological] "applications" were "diffused," as we say, only if it was previously possible to create *in situ* the conditions of a laboratory. The pasteurization of beer or milk, hermetically concealed containers, filters, vaccines, serums, diagnostic kits-all these served as proof, were demonstrative and efficacious, only in the laboratory. If these applications were to spread, the operating room, the hospital, the physician's office, the wine grower's winery, had to be endowed with a laboratory[224].

And, certainly, also the slaughterhouses had to be.

4.6 POLITICS: ACTOR ANALYSIS IN THE STRUGGLE FOR SLAUGHTERHOUSE REFORMS

Following the second step of HMPA, the analysis of the various actors involved in this conflict will be developed, outlining their hegemony

[223] See Brantz, "Animal Bodies, Human Health, and the Reform of Slaughterhouses in Nineteenth-Century Berlin" cit.
[224] Latour, *The Pasteurization of France* cit., p. 90.

projects. This outlining takes into account: the general strategy to solve the broader wealth vs. health contradiction, if present; the implementation of the general strategy in the field of slaughterhouses-animals-meat policies; their social basis and, finally, the power resources[225] of these actors. Given the broader conceptualization of the dimension of politics adopted here and in accordance with HMPA, we will introduce also those strategies, practices and actions which cannot be conceptually subsumed within a hegemony project, while being still relevant to the field of the struggle of forces.

4.6.1 The national-social hegemony project: hygienists and animal advocates

The general strategy of the national-social hegemony project to solve the broader wealth vs. health conflict – conceived as national in scope – was to call for the state to meet national health needs, through administrative, legislative, and institutional means. Thus, with country-specific differences about the extent of the state regulation called for, the dominant approach of the project is, primarily, statism:

> An approach which appealed to persons of varying political persuasions, [. . .] characterized by the belief that the state, by administration and legislation, should assume the main role in public health reform and management. Public health could not be left up to individuals. Statists believed it was the state's responsibility to maintain the health of its citizenry, and public health experts should function as advisors to the state[226].

It is true, however, that the project incorporates also liberal elements[227], thus, sometimes, intersecting and entering into alliances with the liberal project. In the first half of the century, some leading fractions of the project (e.g. Villermé in France) could favor the installation of factories by the legitimization of its pollutions. Since the 1860s, and in a more substantial way after the assimilation of bacteriology, hygienist concerns could weld

[225] See for a detailed account: Buckel *et al.*, *The European Border Regime in Crisis* cit., pp. 18-19.
[226] Ann Elizabeth Fowler La Berge, *Mission and Method: The Early Nineteenth-Century French Public Health Movement*, Cambridge University Press, Cambridge 1992, p. 1.
[227] *ibid.*, p. XII.

with large investments of capital both state-owned and private-owned in the building of new infrastructures.

As to the implementation strategy related particularly to the slaughterhouses-animals-meat policies, it consisted in calling for control and regulation on the production process of meat and by-products in order to guarantee public health, through its centralization (under the control of the state, often in public slaughterhouses), placing a limit on the free market and the interests of particular and powerful groups in the meat trade, mainly butchers' trade organizations.

The national-social project's social base can be found in the sectors related to a set of interconnected knowledges, some more established and some other more recent: medicine, pharmaceutics, chemistry, statistics, civil and military engineering, public administration, and political economy. As it is patent from the quotations of the commentators of the time disseminated in the previous sections, the hygienists were predominantly physicians – traditionally considered as the public health experts par excellence –, but we find also pharmacist-chemists, to perform laboratory experiments; veterinarians to manage epizootics and inspections; engineers and architects to design new infrastructures; and administrators. The socio-structural base of the project, thus, was a (middle) bourgeoisie of (scientific) experts, of professionists[228].

Central actors in the project were health councils, committees and commissions, as well as scientific national academies that spread all over Europe as the result of the process of institutionalization, professionalization and disciplinary development, undertaken by hygienism[229]. As to power resources, these institutions were «government sponsored»[230]. Although the hygienist movement was not an official movement or a party,

> many hygienists functioned in an official capacity. Most held government positions, or positions dependent on the good will of the "authority", working at hospitals, in the prison system, on vaccine commissions, and at medical faculties and professional schools [. . .] Public hygienists were

[228] See *ibid.*, pp. 9-41.
[229] For an overview of national peculiarities of France, Germany, Britain, Sweden and the U.S. see Porter, *Health, Civilization and the State* cit., pp. 96-162.
[230] La Berge, *Mission and Method* cit., p. 22.

members of the "Establishment"[231].

They were also founders, editors, and frequent contributors to influential journals that served as the organ of propaganda of the movement such as the *Annales d'hygiene publique* in France or the *Archiv für Hygiene* in Germany. From these positions, as members of the health councils, editors, and as individual investigators, they pursued their strategy mainly through investigation (sanitary reports, statistics) followed by recommendations for reforms and moralization aims. With an ever-increasing role inside the public administrations, especially after the 1870s and the "marriage" with bacteriology, hygienist's recommendations turned more and more into effective legislation.

Now, following closely Rancière's *dictum* on politics, one may ask: was there a new, previously uncounted, political subject on that stage created by the dissensus? Why were the hygienists to bring this rupture and not the movement of animal rights, which also began in the nineteenth century? The advocates of animal rights, drawing on philosophers like Jeremy Bentham in England and Wilhelm Dietler in Germany, were those who actually could have raised the question of animals as "political subjects", at least speaking in terms of theoretical content. When Henry Salt wrote *Animals' Rights: Considered in Relation to Social Progress* in 1892 – a text which can be considered the apex of radicalism in the trajectory of the nineteenth-century reflection on animal treatment – he was taking seriously Thomas Taylors' parody of women rights carried on in his *A Vindication of the Rights of Brutes* (1792). Salt answered "Yes, animals too" to Taylor's rhetorical question: "if women have rights, why not animals too?". In doing so, as women protested against the denial of the principle of equality towards themselves, Salt affirmed, at least ideally, a potential process of political subjectification of animals aimed at an extension of that principle, through the actions of animal rights advocates. However, this was not the case, due to structural constraints both on the theoretical and practical level.

Although the theory of animal rights was alternative to the theory of indirect moral obligations in particular in its Kantian version – according to which we must refrain from cruelty and violence against animals to

[231] *ibid.*, pp. 22-23.

prevent cruelty and violence against humans – a theory that was adopted by animal welfare associations, the practical demands elicited by these two positions were not that different. «For instance, a comparison between the conclusions of Kant and Bentham as exponents of the two concepts reveals an almost complete consensus: both of them accepted a speedy killing of animals in slaughtering or in the eradication of vermin»[232].

Thus, these two theories converged – mixed with each other and with other older arguments for a fairer treatment of animals (e.g. based on the Bible or on animal souls)[233] – in animal protection societies, vegetarian societies, and anti-vivisectionist movement[234], and were committed to the enforcement of animal protection laws and education of the general public.

The educational, "civilizing", task, inherently moralistic, relied for the most part on the argument of the fear of human brutalization through cruelty to animals. Recurrent were the tirades of humanitarians on the moral damage – i.e. brutalization, repressing compassion – caused by the sight of cruelty in private slaughterhouses on «"the lad and little boys" that they attracted as onlookers»[235]. The humanitarians' pamphlets insisted on a slaughterhouse's iconography where children peek in the doorway, or «peer through cracks in the fence, with the usual juvenile delight in sensational developments»[236]. Such fear and repulsion were especially directed to the lower classes to which, in fact, people employed in the meat production sector (from cattle transport to slaughter) belonged. According to Salt, the

[232] Andreas-Holger Maehle, "Cruelty and Kindness to the 'Brute Creation': Stability and Change in the Ethics of the Man-Animal Relationship, 1600–1850", in Manning *et al.* (eds.), *Animals and Human Society* cit., pp. 113-137, p. 94.
[233] For a review of the role of these theories within the development of the discourse on the ethics of using animals in the period from the seventeenth to the early nineteenth century, see *ibid.*
[234] The prevention of cruelty movement and the anti-vivisectionist movement can be referred to as the «two distinct but overlapping movements» which together compound «the first wave of the animal rights movement» (Margo DeMello, *Animals and Society: An Introduction to Human-Animal Studies*, Columbia University Press, New York 2012, p. 402). Anti-vivisectionist groups attracted a greater radicalism pushing toward the complete abolition of animal experimentation, while the societies against animal mistreatment aimed at regulating it, with a moderate and prudent strategy of lobbying the powerful (members of the governments, aristocrats, judges, lawyers) with whom they cultivated close contacts (Harrison, "Animals and the State in Nineteenth-Century England" cit., pp. 804-809).
[235] MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain" cit., p. 110.
[236] Quoted in *ibid*.

butchery process was that repugnant that it could be only delegated to a «pariah class»[237]. H.F. Lester, barrister-at-law and founder of the Model Abattoir Society (1886), described the kill-floor worker as «an unclean creature» and stated that «the ranks of slaughter-men are habitually made up from dregs of the population»[238]. This fear is, then, mainly to be read as classist and racist fear of social disorder, i.e. fear of the "low moral quality" of the poor and the marginalized, which was, once again, a hygiene issue. From the 1830s on, the racist view related to animal welfare started to be directed against the Mediterranean region and the «inhumanity of southern European races» – to borrow the words stated in 1911 by a British humanitarian[239] – as the cruelty on animals started to be seen peculiarly Latin (e.g. attention was given to French vivisection, Italian brutalities, Spanish bullfights). Other racist, intra-nation, thrives regarded Jewish ritual slaughter (*shehitah*) and reflected a broader level of anti-semitism, especially in Germany[240] and Britain[241]. It was largely denounced by the humanitarians as the cruelest slaughter technique because the traditional "casting" process (throwing the animal to the ground) and the lack of stunning did not respect the humane slaughter's requirements.

To sum up, as Ritvo notes regarding the British main protectionist association – the Royal Society for the Prevention of Cruelty to Animals (RSPCA) –, but the same is true for all the other animal protection associations spreading in Europe and the U.S. following the British example[242] – it «feared

[237] Salt, *Animal Rights: Considered in Relation to Social Progress* cit., p. 61.
[238] Quoted in MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain" cit., p. 111.
[239] Quoted in *ibid.*, p. 108.
[240] See Dorothee Brantz, "Stunning Bodies: Animal Slaughter, Judaism, and the Meaning of Humanity in Imperial Germany", in *Central European History*, vol. 35, no. 2 (2002), pp. 167-193; Robin Judd, "The Politics of Beef: Animal Advocacy and the Kosher Butchering Debates in Germany", in *Jewish Social Studies*, vol. 10, no. 1 (2003), pp. 117-150.
[241] MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain" cit., pp. 115-117, 123-124.
[242] The world's first animal welfare interest group, the Society for the Prevention of Cruelty to Animals which in 1840 become the Royal Society for the Prevention of Cruelty to Animals under the patronage of Queen Victoria, was founded in 1824 in London by Richard Martin, a Member of Parliament from Galway, to enforce Martin's act "to prevent cruel and improper treatment of Cattle" just enacted in 1822 (Harrison, "Animals and the State in Nineteenth-Century England" cit.). In 1837 the first German animal protection society was established in Stuttgart, followed by the foundation of analog associations in 1839 in Dresden and Nuremberg. In 1844 the first Swiss animal welfare society was founded (Ulrich Trohler and Andreas-Holger Maehle, "Anti-vivisection in

social chaos and tended to focus on what it viewed as the disturbingly irrational behavior of the uneducated and insufficiently disciplined segments of society»[243].

This irrational behavior was perceived as such in the framework of modern rationalization and its novel processes and practices under the conditions of CSC which made the previous organization of animal utilization for human aims «antiquated, painful, and inefficient»[244]. The principle that guided animal rights groups, imposing «their "bourgeois moral sensibilities" as a corrective to lower class cruelty», was «that it was wrong to inflict *avoidable* suffering on any animal»[245]. "Avoidable" means no longer functional within the conditions of that framework and thus no longer legitimate[246]. For example, beating a cow while driving her through her way to a private urban slaughterhouse was no longer useful in a context where cows were easily driven to the kill floor through an accurately designed path of pens and corridors. Beating a cow in this context would be abuse, gratuitous violence, a sadistic action. Instead, what could be considered abuse on the basis of other parameters, but it is productive inside this

Nineteenth-Century Germany and Switzerland: Motives and Methods", in Rupke (ed.), *Vivisection in Historical Perspective* cit., pp. 149-187). In 1843 the French *Société protectrice des animaux* was created. In 1857 Sweden passed a more radical protection law against cruel abuse of captive animals regardless of property aspects (Helena Striwing, "Animal Law and Animal Rights on the Move in Sweden", in *Animal L. Rev.*, vol. 8 (2002), pp. 93-106). In 1866 Henry Bergh, a New York City gentleman, who traveled in Europe and Russia as a diplomat, founded the American Society the Prevention of Cruelty to Animals, modeled after the RSPCA (David Favre and Vivien Tsang, "The Development of Anti-Cruelty Laws During the 1800's", in *Det. CL Rev.* (1993), p. 1). Then, in the late 1860s, the ASPCA itself served as model for other SPCAs and humane groups that sprung up around the country beginning with Pennsylvania, Massachusetts, and San Francisco. By 1890, thirty-one states had such organizations (see DeMello, *Animals and Society* cit., pp. 403-405). Spain enacted its first animal protection law in 1877 prohibiting the maltreatment of dogs (Loïs Laimene Lelanchon, "Detailed Discussion of Anti-Maltreatment Laws in France and Spain", in *Animal Legal & Historical Center* (2013), `https://www.animallaw.info/article/detailed-discussion-anti-maltreatment-laws-france-and-spain`). These societies were variably connected: e.g. representatives from different countries mutually attended annual meetings of other European societies; RSPCA, undoubtedly the leader among the societies, launched in 1862 a special fund for continental operations or prevented the Prince of Wales from attending bullfights while visiting Lisbon and Madrid in 1876 (Harrison, "Animals and the State in Nineteenth-Century England" cit., p. 803).

[243] Ritvo, "Animals in Nineteenth-Century Britain" cit., p. 109.

[244] Otter, "Civilizing Slaughter" cit., p. 93.

[245] MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain" cit., p. 110.

[246] See on this Piazzesi, *Così perfetti e utili* cit., pp. 159-163.

framework (e.g. the imprisoning of animals inside confined spaces), is functional and therefore it is considered as a legitimate use. Hence, the reforms against cruelty on animals stood against an obsolete, and thus perceived as an uncivilized, system of organization of animal exploitation (the pre-capitalist one), its institutions (decentralized slaughterhouses, city livestock markets) and its representatives (butchers, slaughtermen, urban cows owners, cattle drivers, cattle dealers, meat traders, street vendors, etc.).

Indeed, regarding the slaughterhouse struggles, their chief objective was the abolition of the old private slaughterhouses and the introduction of municipal, centralized, and licensed abattoirs where the humane slaughter could be actually implemented and surveilled.

> Such abattoirs would be large enough that they could provide vocational training in the butcher crafts before young men engaged in the huge responsibility of humane slaughter. A larger production scale would permit slaughtermen to become specialized and more skilled in their task within a more detailed division of labor. And new public abattoirs would be engineered so that cattle could walk calmly to the slaughter chamber. unstressed and oblivious to their fate[247].

The main principle for humane slaughter was that animals should be stunned before blood is drowning and to accomplish this principle innovative science-based technologies were developed since the 1860s, under the impulse of animal advocates. Experiments were made with electrocution and carbon dioxide gas, slaughter masks, and later with firearms technology in the configuration of free bullet and cartridge-propelled captive bolt[248]. In such demands we find perfect welding, both in terms of reasons and in terms of objectives, with the hygienists. There is a complete confluence with hygienists' discourse of civilization and sanitation.

Therefore, animal rights societies, despite being actors in this *dispositif* with a trajectory of conflict of their own, can be inserted within the hygienist strategy framework and the social-national project. Moreover,

[247] MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain" cit., p. 115.
[248] See *ibid.*, pp. 117-121.

not surprisingly some animal welfare advocates were also involved in the public health movement since they belonged to the same social basis of urban bourgeois scientific experts. However, the two social bases did not coincide entirely: in fact, within associations against animal suffering, broadly intended, we find also members of educated rural and urban clergy and marginalized reform-minded aristocrats[249]. The social basis slightly varied depending on the main focus and institutional position of the associations: in the anti-vivisectionist/vegetarian groups there was a strong presence from the spiritual/religious component, worried about «a scientocratic and materialistic view of the world»[250], while the welfarist groups, more characterized by professionalism and expertise, counted many members tied to the medical and scientific communities, especially lawyers and veterinarians[251].

4.6.2 The conservative hegemony project: butchers

The conservative project is involved in the conflict under examination in a secondary sense, i.e. as a reaction to the strategies of the other hegemony projects, thus it lacks a general strategy. Regarding the slaughterhouses-animals-meat policies, instead, the conservative project's strategy is to carry on «the old regime's market culture of paternalism»[252], where meat supply was entirely handled and controlled by some sort of meat «cartels»[253] of powerful associations of urban licensed butchers in deep reciprocity with cattle traders and rural agricultural interests, and bounded by «tradition and a clear sense of hierarchy»[254]. These associations, after struggling against

[249] See *ibid.*, p. 111. For example, the British Council of Justice to Animals counted two dukes, two duchesses, three earls, three countesses, five lords and ladies, a major-general, and an archdeacon among its eighteen vice-presidents in 1911 (See Lee, *Meat, Modernity, and the Rise of the Slaughterhouse* cit., p. 269).
[250] Maehle, "Cruelty and Kindness to the 'Brute Creation'" cit., p. 100. See Richard D. French, *Antivivisection and Medical Science in Victorian Society*, Princeton University Press, Princeton/London 1975.
[251] The RSPCA's expertise «by the 1860s [. . .] was frequently being drawn upon by the public, by the police and by politicians» (Harrison, "Animals and the State in Nineteenth-Century England" cit., p. 808). Moreover, it «encouraged the professionalization of groups concerned with animal welfare. It consistently upheld the veterinary surgeon's status, which needed "to be raised higher for his own good, and for the better treatment of animals"» (*ibid.*, p. 809).
[252] Horowitz *et al.*, "Meat for the Multitudes" cit., p. 1065.
[253] *ibid*.
[254] *ibid*.

competition from non-member meat vendors and butchers, caused by (internal) liberalization measures removing the apprenticeship requirement, were rearranged in a less exclusionary direction in face of the threat posed by the new health reforms and «alien meat»[255] coming from foreign markets. The objective now was to defend the butcher's private property interests and his "right to slaughter his cattle upon his own premises", as a British' parliament paper put it in 1847[256].

The social basis of the conservative project was multilayered, reflecting the aforementioned process of enrichment of meat trade associations. On one side, it was composed of ancient powerful family firms, connected to wealthy merchants and often also to landowning nobles. On the other side, there were the more recent «growing middle class of shopkeepers and petty capitalists»[257] emerged after (internal) liberal experiments.

Central actors in this project were butchers and meat craft organizations (such as London's Worshipful Company of Butchers – chartered in 1605 – or the National Federation of Meat Trades (NMFTA) established in 1888 in the U.K., or the *Syndicat de la Boucherie de Paris* created in 1811). On the one hand, these societies inherit the strong sense of corporate identity, the spirit of honor and service which characterized eighteenth-century guilds or semi-guilds. They continued to stress and vindicate a kind of apprenticeship, artisanal craft, indisputable expertise on the field, challenging the qualification of outsiders (both humanitarian dilettantes and veterinarians) to assess the trade or to dare to regulate it. On the other hand, they drew on the indisputability of private property rights and lasseiz-faire economic policies, safeguarding the interests and rights of master butchers and meat traders against the incursion of officialdom and big capitals. «They saw themselves as honest victims of a reform fad, heroic small traders whose dogged determination and craft organization would prevail over a growing agro-industrial monopoly and officious interference from municipal bureaucrats and public health authorities»[258].

Representatives of these societies had an active role in political affairs. They were often influential members of municipal councils as well as of

[255] Lopes, "Struggles over an 'Old, Nasty, and Inconvenient Monopoly'" cit., p. 372.
[256] Quoted in MacLachlan, "A Bloody Offal Nuisance" cit., p. 230.
[257] *ibid.*, p. 230.
[258] *ibid*.

committees of local authorities such as sanitary committees or markets committees. They were also involved at national political levels, holding parliamentary offices. Butchers' associations were also editors of specialist journals (such as the *Meat Trade Journal* in Britain) where they «publicly refute the reckless and inaccurate assertions of reformers, and [. . .] defend their craft from unflattering portrayals»[259].

4.6.3 The liberal hegemony project: meatpacking companies

The liberal project's overall strategy in the health vs. wealth conflict was on the side of wealth, promoting the primacy of economic growth, high-profit rates, and competitiveness by means of industrial exploitation in Europe and colonial expropriation.

Regarding the slaughterhouses-animals-meat policies, the strategy of the liberal project presents a schism between "national-liberal" and "international-liberal" fractions, with their different scalar strategies. The first one was prevalent in the process of liberalizing the internal national meat trade and then it came to overlap with conservative concerns when confronting with "international-liberal" fraction as well as with the national-social project. The range of action of the second fraction, emerging since the 1860s and 1870s, was not national in scope, rather it was framed in colonial/national relations and liberalized trade between European nations (cattle trade in the first instance and then, after the introduction of refrigerating techniques, meat too). The strategy was to take over the meat production and consumption process, centralizing it in profit-seeking corporations' owned facilities, thanks to large investments. Big business interests here intersected with the national-social project of sanitary reforms, posing a threat to local meat economies and local butcher business. The strategy of liberal centralization has its peak in the idea of meatpacking facilities which embodies the promise of affordable, abundant and sound meat for the masses.

The liberal project's social basis reflected the schism in its fractions: middle-class bourgeoisie and big industrial and financial bourgeoisie. Central actors in this project were large corporations, big meat and railroad

[259] MacLachlan, "Humanitarian Reform, Slaughter Technology, and Butcher Resistance in Nineteenth-Century Britain" cit., p. 125.

companies, together with their allies in city halls and health departments. In particular, the action of federal governments (e.g. in the U.S.[260] and Brazil[261]) was paradigmatic in favoring, through federal research and financial support, the liberal strategies regarding meat production and new interest groups, such as cattle suppliers aligned with domestic and foreign investors. As to power resources, the actors in this project possessed large material resources that allow lobbying activities capable of influencing aspects of state policies, as well as the adoption of the nascent meat marketing and advertising methods. The project was also supported by scientific expertise and think-tanks that promoted its strategies and, in general, it was marked by a positivist attitude, overlapping here with hygienists' scientific orientation. It was not only a matter of promotion: in some cases the welding between economic interests and new sciences (chemistry, nutrition, etc.) was total. Paradigmatic, in this sense, was the case of Liebig's meat extract that we have outlined above.

4.6.4 Escape strategies: animals

Directly involved in the conflict around slaughterhouse reforms were, obviously, the animals on whose skin the various hegemony projects literally aimed to take decisions. These animals, however, were not merely a passive field of law enforcement, resources to be managed and governed at will according to this or that strategic objective. If we adopt a non-anthropocentric perspective on the concepts of agency and animal resistance, in fact, even cows, livestock, pigs, etc. can be considered political agents (social actors) that with their everyday practices of refusal, avoidance, sabotage enact escape strategies, in the sense of HMPA we have defined above in the second chapter.

In the last decade, different perspectives and reflections on the concept of animal's political agency have emerged broadly within the debate on human-animal relations, particularly in the field of CAS[262]. Such perspectives resort to different theoretical frameworks of reference in their respec-

[260] Brinkley and Vitiello, "From Farm to Nuisance" cit.
[261] Lopes, "Struggles over an 'Old, Nasty, and Inconvenient Monopoly'" cit.
[262] See for an overview Chiara Stefanoni, "Resistenza animale: un'introduzione", in *Di stelle, atomi e poemi. Verso la physis*, ed. by Enrico Giannetto, Aracne, Roma 2019, vol. 2, pp. 57-71.

tive elaborations of the issue: e.g. Foucauldian inspired approaches (e.g. Piazzesi[263]); traditional Marxism and (post-)operaist inspired approaches, as we have seen in the first chapter, (liberal-)democratic theory (Kymlicka and Donaldson[264], Meijer[265]). This variety and richness of perspectives reflect the variety of animal exploitation contexts and, in general, human-animal power relations (zoo, circuses, farms, "wilderness", laboratories, urban spaces, agriculture, transport) as well as the variety of animals they involved (tigers, elephants, cattle, cows, pigs, pigeon, rats, chicken). Despite their differences, each of them undermines a fundamental *topos* of anthropocentrism which sees non-human animals as voiceless beings, and therefore excluded from politics, according to its Western traditional definition. One approach to the issue of animal political agency that assumes particular relevance in the conflict around slaughterhouses and meat inside the HMPA dimension is transnational postcolonial feminism informed framework proposed by Sarat Colling and called "animal without borders"[266]. This perspective draws also on animal geography's analysis of exclusion/inclusion of animal bodies in the urban space, focusing on the notion of border. Animals, indeed, trespass borders: escaping, running, hiding, jumping over the fences that keep them locked up, or breaking through them. These violations reveal «who has the power to create and dismantle borders—whether the dividing lines between nation-states or the walls of a slaughterhouse—and who has the power to cross them at will»[267]. What is important in these everyday practices as to a redefinition of political agency is not if they are intentional acts of resistance directed at a specific aim. Rather, what matters are the effects, the impacts on the surrounding environment triggered by this trespassing.

In nineteenth-century cities, as we have seen, animals were everywhere: pigs and hogs wandered the streets, cattle, oxen, sheep were driven from the countryside, ports, rail yards, to the city markets and then to urban

[263] Piazzesi, *Così perfetti e utili* cit.
[264] Sue Donaldson and Will Kymlicka, *Zoopolis: A Political Theory of Animal Rights*, Oxford University Press, Oxford 2011.
[265] Eva Meijer, *When Animals Speak: Toward an Interspecies Democracy*, NYU Press, New York 2019.
[266] Sarat Colling, *Animals without Borders: Farmed Animal Resistance in New York*, MA thesis, Brock University, 2013.
[267] *ibid.*, p. 109.

slaughterhouses, urban dairy cows crowd the sheds, horses and dogs draw carriages and coaches... Each of these contexts implied violence and constriction toward animals who, then, answered back in their own ways: kicking, biting, running, escaping, bolting, escaping, refusing, pecking, and so on. Especially, animal resistance was more effect-breaking when it came to traffic. Here, escape strategies provoke traffic hazards, congestion and accidents, that fall within the notion of animal nuisance, being a great source of complaint and being subject to administrative ordinances (such as ordinances to prevent the driving of animals in certain streets at certain times of the day). For example, Paris' municipality imposed a ban on harnessing dogs due to a widespread fear of accidents. As we read in police regulations of the time:

> Considering that, contrary to previous regulations, merchants, butchers, bakers, tripe butchers and others routinely use carriages pulled by dogs for the transportation of goods;
>
> That these small carriages, whose manoeuvrability is difficult because of the dogs' *unruliness*, rush daily to the covered markets and outdoor markets at the very hours that adjacent roads are the most congested by pedestrians and vehicles of all types; that these carts, despite their drivers, slip between other carriages and frequently cause inextricable traffic hold-ups and annoyances;
>
> That these animals are forcibly overworked sometimes *irritates* them to such a point that several drivers and even passers-by have already been seriously *injured*;
>
> Finally, considering that dog-driven vehicle traffic in the capital is a permanent cause of accidents, and that the large number of these animals increases, in frightening proportions, the danger of rabies and that this is a perpetual, and unfortunately well-founded, fear in the population, is one of the calamitous scourges that the municipal authority must prevent by all available means[268].

Dogs' "unruliness" and irritation, together with health concerns, affected, in a political way, the environment calling for a reaction from administrators.

For sure, there is no party of the animals with general political objectives, nor a movement in its traditional meaning, nevertheless in their everyday

[268] Quoted in Sabine Barles, "Undesirable Nature: Animals, Resources and Urban Nuisance in Nineteenth-Century Paris", in Atkins (ed.), *Animal Cities* cit., pp. 173-187, p. 183. [emphasis added]

practices of "waywardness"[269] they aim to an improvement of their conditions of life and liberation. Although non-deliberately, these practices have effects on social forces and their projects, which, then, react to them somehow. What Papadopoulos, Stephenson and Tsianos say about people escape strategies can be applied, *mutatis mutandis*, also to animals. «[Animal]'s escape, flight, subversion, refusal, desertion, sabotage or simply acts which take place beyond or independently of existing political structures of power force sovereignty to respond to the new situation which escaping [animals] create, and thus to reorganise itself»[270].

Process Analysis

In our view, it was meat centralization as a hegemonic political project, which defined the main thrust of meat policy that emerged out of the struggles between the hegemony projects outlined so far.

The debate around the reforms has been everywhere quite intense, long and fought on different front lines: municipalities and councils, courts, press, academies. Despite the specific features of each individual case, the dynamic of the debate had recurrent tropes. A first phase in which hygienists' call for government intervention to solve the problem of animal nuisance and meat unwholesomeness fails to achieve effective results in the area of legislation. This practical failure was due to the prevailing of internal/national liberalization strategies of the legislators which favor the free market and the rights of private butchers over public health concerns as well as conservative meat craft guilde-like organizations. Local inertia, lack of direction from central governments and the absence of universal consent from the medical and scientific communities regarding zoonoses also contribute to holding back reforms. However, hygienists' publications and tireless work increase awareness of the public health problems associated with meat production, influencing consumers' choices and, eventually, progressively achieving legislative and institutional victories, also thanks to the support of the international-liberal fraction and the process of mutual appropriation concerning bacteriology. The national-social project

[269] Buckel *et al.*, *The European Border Regime in Crisis* cit., p. 19.
[270] Dimitris Papadoupoulos *et al.*, *Escape Routes. Control and Subversion in the Twenty-First Century*, Pluto Press, London 2008, p. 43.

of slaughterhouse centralization becomes therefore hegemonic constituting one of the pillars at the origin of the welfare state, recomposing the health vs. wealth conflict under the aegis of the nation-state. «Revolution in meat provisioning [. . .] were integrally part of the democratic revolutions»[271].

[271] Horowitz *et al.*, "Meat for the Multitudes" cit., p. 1067.

CONCLUSION

This thesis posed the tripartite question of a) how to give socio-material depth to the intersectional perspective; b) how to frame capitalism in non-reductionist ways and c) how animal oppression is articulated with capitalism. These questions are sides of the same coin because answering a) and b) is crucial to answering c) and thus to account for modern animal oppression in a proper way, i.e. in order to grasp what qualitatively distinguishes it, its peculiar form.

The importance of these questions for CAS field, within which my work is located, rises from the fact that the tenets of intersectionality and anti-capitalism which characterize it can enter into contradiction. This weakens the radical potential for change that a consistent critical theory of society (as CAS defines itself), in its being future-oriented, can and should have. In fact, the contradiction emerges when it comes to theorizing on an abstract-conceptual level – not on the level of empirical description – the relation between the intersection of various forms of oppression and the capitalist social complex, this relation being reduced either to the cultural or to the economic.

In chapter one, the presentation of the intersectional approach, reviewed from a historico-conceptual point of view both in its main version coming from black feminism and in its ecofeminist version, showed its strengths and weaknesses. We saw how this perspective can be promising for social criticism and social analysis thanks to a multilayered, complex, dynamic framework of society, subjectivity and oppression in order to have inclusive, multi-optics and non-single-issue readings that favor political solidarity between oppressed groups. All of this works well on the micro-level of

analysis which is focused on empirical case studies of multi-marginalized subjects. However, such framework becomes problematic when it comes to the macro-level of intersectional analysis, which, at least on paper, aims to make sense of the why and the how of interlocking between oppressions as part of a larger picture or structure of domination. As we saw, Plumwood's refined account of the dualism of Western culture, with its list of overlapping conceptual pairs and its logical features, can help in identifying and explaining the formation and reproduction of enmeshed oppressions from a "larger picture of domination" perspective, but it does so *only* on a symbolic/discursive level. Here, the critique of capitalism would end to be included in the critique of the logic of dualism. Such undertheorization of the social and lack of robust theory of social complexity, in favor of culturalism, is a weakness for CAS' consistency – engulfing its other fundamental tenet – as well as for CAS' analytical grasp as critical social theory, because it would deprive CAS of the survey of material structures of social complexes.

Thanks to the discussion of the various analyses of capitalism pursued within the field of CAS, it was illustrated how they, on their side, are deeply undermined by the fallacies of the respective Marxist traditions they adopt. In particular, the main problems concern economical reductionism and determinism of traditional Marxism on the one hand (Nibert, Torres), and the humanist philosophy of history, centered on the concept of alienation, inherited from the Frankfurt School, on the other hand (Sanbonmatsu, Maurizi, Weisberg, etc.). Even if these authors integrate speciesism with other systems of domination to superficially address intersectionality tenet, they maintain the primacy of animal oppression, claiming a continuist model, so to say, according to which the dominion on animals (and nature) is the originary model of oppression and of human productive activity that is quantitatively increased and taken to the extreme by capitalism. In this, they give a flawed account of the social not grasping the salient features that make a society capitalist or not and miss the structural and qualitative change undergone by animal oppression with the capitalist transition. This way they fail to draw a clear-cut relation between capitalism and the exploitation of animals. After all – contra the intentions of these authors – from this point of view, it could be possible, in principle, to obtain the end

of speciesism without this having to entail the end of capitalism. If it is a quantitative problem, in the current state of affairs it would be ”enough” in order to end speciesism to remove animals from capitalism (for example by producing vegetable substitutes or in-vitro meat). Here, not only the tenet of intersectionality is engulfed, but ultimately CAS is left without an adequate theory of capitalist society and animal oppression.

Starting from this lacuna, this thesis achieved 1) a general objective that answers research questions a) and b): the delineation of a macro-logic for material and intersectional socio-political analysis of CSC which constitutes a consistent basis for the critical analysis of society. Through the analytically distinct levels of social forms, *dispositifs* and politics and through the charting of their relationship dynamics, it is possible to properly analyze concrete social complexes or portions of them, both in their structural constants and in their institutional-agency variability.

As we saw in chapter two, the perspective of social forms and the social *formanalysis* put forward by the New Marx Reading allows deciphering logically – i.e. by means of abstract-conceptual reconstruction, through an ”anamnesis of the genesis” – the social relations which in the specific condition of capitalist production are being fetishized (both reified in things and institutions and naturalized in ”objective forms of thought”) – and which mediate the socialization and thus social cohesion of individuals behind their back. The autonomization of social forms makes them confronting the individuals as natural forces with “inherent necessities” which individuals do not control. Thus, in capitalist social complexes, the decisive relations of domination and exploitation are not personal but impersonal, mediated by ”things”(fetishized social forms as reified and naturalized modes of organizing social relations).

Social *formanalysis* makes it possible on the epistemic level to show and to examine the *constitution* of categories/forms of relation which – as effect of the naturalization – instead seem to be the natural forms of social life, immutable and valid for every society and every subjectivity. Thus, thanks to the work of *formanalysis* it is possible to outline the constitution of social complexity in the *specific* conditions of capitalist production and thus conceptually reconstruct the abstract structural connection (the ”anatomy”, the ”system-limit”) which allows speaking meaningfully of a given society

as a capitalist one and which involves specific constraints, purposes and reproductive dynamics regarding power, knowledges and subjectivity, the three fundamental aspects of critical theory of society. However, this level of abstraction cannot and does not pretend to answer the questions of how this formation takes place in actual historical configurations, in specific institutional constellations, processes, social actions, nor how it is possible to produce social changing. These are answers that can be addressed through the integration with the dimension of *dispositifs* which account for the empirical reality of social phenomena, i.e. the element of variability, contingency, diversity of the social. The Foucauldian notion of *dispositifs*, meaning *networks* of institutions and mixed practices, authorized by correlated scientific knowledges, with subjectivation effects, deals with the same components of power, knowledge and subjectivity, as the forms do, but on another stage in the analysis. If the forms give the skeleton, the *dispositifs* give the body, we can say. As highlighted in the chapter, the integration with the forms means at the same time a modification which resolves problems of Foucault's formulation of the concept, especially regarding power. Differently from (but bound to) impersonal domination which refers to the relatively permanent social bonds determined by the social forms, the kind of power relationality of the *dispositif* is conflictual: the field of struggle between social forces, tactics, strategies that this thesis grasped with the concept of politics. Drawing on Rancière's distinction between politics and the police, but loosening it, politics was identified with the dynamic of disagreement over a social order's given assumptions and the alleged naturalness of the "*places*" it allocates. This dynamic involves both the side of the police (the "forces of law and order": procedures and social actors involved in the governing) and the side of antagonism – which thanks to a process of a collective politicization (against the idea that politics is everywhere because power relations are everywhere) opens in the first instance the quarrel – as well as the grey zones between the two. To capture this dynamic the thesis resorted to the tools developed by HMPA, which in turn reworks Gramscian concept of hegemony projects to systematically account for specific social forces, actions, practices and strategies. Its sophisticated method of context, actors and process analysis allows mapping empirical conflicts with respect to given policy fields.

Of course, the distinction between different independent levels of social materiality (i.e. concrete phenomena [social entities]: institutions, practices, subjects) is purely analytical, not ontological. As extensively outlined in the chapter, the social forms *shape* – being matrix of the production of social entities – the set of institutions, knowledges, trajectories of power in a given reticular layout which, at the same time, materializes them, making them accessible to abstract-conceptual reconstruction.

Hence, thanks to the analytical distinction of the different dimensions of social complexity and their dynamic, the notion of "materiality" was redefined in a non-reductionist way as it prevents immediate welding with the economic or with a vague notion of "institutions and practices" opening up the possibility of identifying other necessary social forms, that cannot be reduced to the economic or political ones. It is an opening to the identification of specific forms of what, in standard Marxist theory, is made to fall into merely cultural or merely superstructural, i.e. what we called "forms of production of population". On the contrary, chapter three contended, thanks to the analysis of the nation form as a "whole" rooted in economic/political fetishized forms, that this is not the case and that between economic/political forms and capitalist forms of population production there is a relation of functional interference. Or, to recall Foucault's words: the "accumulation of capital" and "accumulation of human" cannot be separated.

The identification of forms of population is the first step toward the second result 2) achieved by this work, answering research question c), i.e. the identification and determination of a clear-cut relation between animal domination and CSC. In fact, by means of a work of *formanalysis* which coincided with the first stage in the operationalization of the material macro-logic, the thesis abstractly-conceptually reconstructed the constitution of the anthropological form as a form of population production. This meant bringing to light the anthropological matrix of the production of population which separates and selects it as distinctly human, a matrix whose givenness is an effect of the fetishized (reified + naturalized) form itself. Thus, the capitalist organization of human-animal relation was deciphered by analyzing its qualitative change in the specific dynamics of the transition to capitalist modernity, in the passage from domesticity to

postdomesticity. We saw that this transition brings to an end the *societas*, as closed unity and nucleus of production and reproduction of human&animal population, as well as of use-values production, giving rise to the specific separation of human and animal.

This analysis is essential because allows eliminating the naturalization side of the fetishized anthropological form, recognizing it as the capitalistic mode of organizing human-animal relation, with its effects of power, subjectivation and knowledge. This means seeing human/animal distinction and meat orientated nutrition not as trans-historical phenomena of biological-naturalistic survival but rather as a concrete social solution that allows for production not only of the worker but of all the social figures (the human population) necessary for the reproduction of the CSC.

Then, thanks to the second step in the operationalization of the macrologic it was possible to subject to historical reconstruction the first materialization of the form thanks to the definition and analysis of the dietary *dispositif* which accounts for the so-called nutrition transition to a meat-based diet. It was shown that this transition has been the result of a complex entanglement of lines of knowledge, institutions, practices, and conflicts, which has answered the urgency of what commentators of the time called "health vs. wealth" conflict, i.e. the peculiar historical realization that the structural social-crisis tendency of capitalism took on in nineteenth-century liberal competitive capitalist society. To resolve the problem that "the consumption of human life as a combustible for the production of wealth" represented for the reproduction of this CSC tout-court, the allocation of the place of meat-animals was completely redefined through the process we labeled with the expression "hygienizing meat".

The fourth chapter untied this entanglement of lines, starting from the analysis of the institution of the modern slaughterhouse. The new slaughterhouse as a centralized, mechanized and multi-dimensional complex, distant from urban centers, for the efficient killing of animals and producing meat, emerged as the concrete solution to hygiene worries for improving good health and avoiding bad health, safeguarding *bíos*. Von Liebig and nutrition science gave the answer to the first concern with the discovery of protein. Miasma theory met the second requirement by equating smell with disease and the most dangerous odor with blood. Then Pasteur and

bacteriology provided for a synthesis of the two: nutritious meat is from healthy animals. The keyword emerging from here was *centralization* and centralization meant separation: pigs, cattle, sheep, dogs, chickens, turkeys, horses... the animals were removed from the crowded streets of the cities, household courtyards and markets and centralized in abattoirs, they were removed from the cultivated fields where they used to go to feeding, manuring and reproducing and centralized in industrial farms.

The abundant references to the case studies scattered throughout the chapter enabled us to touch with hand, so to say, the multifarious and variable historical processes of materialization/constitution of the form and the trajectories of politics, strategies and social actors mapped with the help of HMPA: La Villette with its tradition of artisanal butchers, the Union Stock Yard and its "swamps", Cincinnati and its mechanized wheel, Moscow public abattoir with its auditorium, the ever-ending debates over animal nuisance in London and the moral outrage raised by the cattle driven to the Smithfield Market, the French debate on contagionism or anti-contagionism, the English Humanitarian League's call for the humane slaughter... the recurrent insistence of mid-nineteenth-century observers on "the most offensive and disgusting" odor of blood, manure and animal carcasses, which painfully enabled us to touch with hand, or rather to "smell" the never-ending horror of animal suffering in meat production process.

Epilogue

Much of this thesis has been written during the months of lockdown due to the COVID-19 pandemic that has crushed the world since February 2020. If it is true that 2008 financial crisis had brought Marx and the critique of capitalism back into the limelight, grasping the enormous inequalities and unfair distribution of wealth produced within CSC, it can be said that SARS-CoV-2 has brought to the forefront the critique of capitalism grasping its being unsustainable for life, both human and nonhuman. While the first wave of the pandemic was raging and the ambulance sirens ringing in my ears, I was working on the section devoted to the analysis of the dietary *dispositif*, thus I was dealing with the mid-nineteenth-century health vs. wealth conflict, hygienist concerns of all sorts, the raging of zoonoses in

Europe, outbreaks of tuberculosis, trichinosis, pleuro-pneumonia, anthrax, salmonella, chicken cholera... It was easy to draw a parallelism between my object of study and the contemporary situation of this 2020 brand new zoonosis which took the lesser evocative name of COVID-19.

Are we again in a historical conjuncture in which the systematic blindness of capitalism toward the conditions of possibility of its own existence has led to a direct contradiction between social reproduction and valorization process, as in nineteenth-century liberal competitive capitalism? It seems so. In the current neo-liberal capitalist social complex, the social reproduction of human population (of human labor-power) is (mostly) no longer directly threatened by unsustainable conditions of work (even if a great erosion of social welfare and workers' rights have to be considered), but from a virus coming from wild animals whose spillover has been clearly related to the capitalist global circuit of animal industrial agriculture (just like climate change, actually)[272].

After (only) two hundred years, what had been a solution to a capitalist reproductive crisis, that mid-nineteenth-century "energy crisis" that so worried the hygienists – i.e. the separation and centralization of life and death of animals in order to get healthy and affordable meat for the "victualling of the masses" – has stopped working and has become a problem for that same human life which instead it had to produce and safeguard, at the expense of the life of billions of animals. This new crisis is so manifestly connected to these billions of lives, to meat (and in general animal source food) process production and to the *dispositifs* of animal oppression which materialize the anthropological form – just think of the hundreds of COVID-19 outbreaks in slaughterhouses from all over the world and in various minks farms for fur – that it indicates the only sustainable direction which the trajectory of political conflict must take: the abolition of the separation itself and, with it, of the other CSC's specific separations.

In claiming this I am aware that I am adding myself to the wishful thinking voices sustaining "the destabilizing potential of crisis and its promises of revolution" perspective. It is reasonable to deem such a

[272] See Rob Wallace *et al.*, "COVID-19 and Circuits of Capital", in *Monthly Review*, vol. 72, no. 1 (2020), pp. 1-13 and Rob Wallace, *Big Farms Make Big Flu: Dispatches on Influenza, Agribusiness, and the Nature of Science*, NYU Press, New York 2016.

perspective unrealistic, especially against a world that is answering to the crisis by further widening human-animal separation (for example, by exterminating all the infected minks as happened in Denmark in November 2020 or by ordering meat processing plants to stay open by invoking a Korean War-era law from the 1950s, as former U.S. President Donald Trump did in April 2020). And not only with regard to human-animal separation, but this widening movement is occurring also regarding the other CSC's specific separations which are going back to tread a nineteenth-century path and model even along the line of gender (heterosexism) and ethnos (racism).

However, thanks to the material macro-logic outlined in this thesis, in its peculiar dynamics between fetishized forms, *dispositifs* and politics, I believe it is possible to have a better comprehension of the functioning of CSC thus orienting the struggle that, as we proved, has to be intersectional, through a necessary process of collective politicization, against the structural anatomy of CSC which is materialized in given *dispositifs*. This means orienting socio-political struggle toward both the discussion of the form-determination of the "objective forms of thought" bringing them back to the materiality of social relations underlying them (struggle against naturalization) and toward the change of the daily practices of (re)production of life, replacing the existing ones in order to dissolve capitalist reification.

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