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THE SPANISH PIG OUT: A CRITICAL ANALYSIS OF CORPORATE POWER IN SPAIN'S PORK INDUSTRY

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In this cosmological moment in space-time, I dedicate this thesis to
my loving grandmothers: María Brañas Pérez and María Encarna-
ción Pérez Matas.

May their souls rest with the stars

Thank you to Mindi Schneider and Lee Pegler for their patience and support throughout this process

Disclaimer:

This document represents part of the author's study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

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List of Acronyms

GM Genetic Modification

TNC Transnational Corporation

AGP Antimicrobial Growth Promotes

UECBV European Livestock & Meat Trading Union

EU European Union

CWE Carcass Weight Equivalent

GMO Genetically Modified Organisms

CAP Common Agricultural Policy

MAFE Ministry of Agriculture, Food and Environment

Abstract

In recent decades, transnational corporations (TNC's) in general and leading agribusinesses in particular have increasingly gained power to influence the rules by which they themselves must play (Clapp and Fuchs 2009: 2). Susan Sell's (2009) three forms of power will allow me to critically analyse Vall Companys Group, Spain's leading pork producing firm. This will help me to answer what the role of growing agribusiness firms is in governance and the implications of such growing corporate activities, on market, society and environment. This will form part of my overarching objective to prove that Spain and Vall Companys form part of the 'globalization project', and are highly embedded in McMichaels corporate food regimes (McMichael 2005).

Relevance to Development Studies

This paper serves as a tip of the iceberg, since Spain seems to be under researched, in particular from critical perspectives. I come from the perspective that the global North also needs to be engaged with critically. This paper is relevant to the development studies of Europe and Spain, expanding awareness of agrifood governance in a globalizing world agriculture.

Keywords

Spain, agrifood governance, power, pork production, consolidation, Europe

Chapter 1: Introduction

In recent decades, transnational corporations (TNC's) in general and leading agribusinesses in particular have increasingly gained power to influence the rules by which they themselves must play (Clapp and Fuchs 2009: 2). For example, recently, Catalonian parliament has approved a resolution in favour of independence from Spain, setting off an alarm amongst investors, arguing that the independence will prejudice investment and the locations of business headquarters. By November 2015, Cataluña lost 683 businesses of which 306 of them relocated to Madrid. This is particularly the case for Vall Companys Group which relocated their headquarters from Barcelona to Madrid (Baratech, Cronica 2015). Although, claiming that independence will prejudice investors is easy to say. The Catalonian government, The Generalitat, consider this an attack on Catalonian's economic reputation (Pellicer 2015) and furtherly shows how agribusiness firms such as Vall Companys Group in Spain are capable but not obliged to, taking a political stance, and in fact have the capacity to act upon it. Even though Cataluña's referendum was not legally accepted by Madrid or any constitutionalist. The transitioning of a billion-euro company headquarters from Barcelona to Madrid can also be viewed as a political act, with the attempt to pressurize Cataluña to give up on independence. Since no party has won majority in the past two elections, Spain sits at an all time record of ten months (I have found myself continuously updating this number as the weeks go by...) with no official representative government, and if negotiations continue to fail the Spanish population will see itself going to a third election in less than a year.

This research paper will investigate governance in Spain's agrifood system, understood as part of the contemporary global agrifood system. In addition, analysing agribusiness market and political power in the context of this recent pork production boom in Spain. In particular, my attention will be brought to the 21 companies which form part to complete the Vall Companys Group's pork sector.

Even though specific emphasis is being placed on a new era of dialogue in Spanish politics, it is clear that party politics places the population's concerns out of the political spaces, and priority remains in keeping ideologies, preferences, interests, parties and allied companies, families, and individuals more in control than those of their opponents. It is true that dialogue is taking place, as more parties have been introduced into national political debates, yet negotiations have failed. That is considering we understand what negotiations mean. In a simple understanding of negotiations in a situation such as this, both parties on the table must sacrifice something in order to gain another objective. On this basis, dia-

logue exists, but negotiations fail. In fact, if we look at some easily accessible statistics, Jose F. Leal in his article 'LOS DUEÑOS DE LAS 200 MAYORES FORTUNAS, UN 16% MAS RICO EN 2015' in the newspaper El Mundo points to how the richest 200 individuals and families in Spain have a total net worth of EUR 205.609 million in 2015, a 16% increase since 2014 and EUR 74.000 million more than five years ago. More so, this number adds up to being worth 19% of Spains total GDP in 2015. Additionally, Oxfam's 'Una Economía al Servicio del 1%: Acabar con los privilegios y la concentración de poder para frenar la desigualdad, La situación en España' (Oxfam 2016) serves to demonstrate how the richest continue to get richer (disparity between rich and poor continues to grow), even in times of "crisis." On this basis, the term 'crisis,' can be viewed critically, and a Marxist class based approach would shine light on who in society is actually going through a crisis.

Oxfam quickly points to how the richest 1% in Spain almost have as much wealth as the 'poorest' 80% (Oxfam 2016). Engaging with personal fortunes demonstrates to the degree which individuals such as Amancio Ortega continue to concentrate in riches. In fact, Ortega almost quintupled his total net worth from EUR 10.700 million in 2008 to EUR 59.606 million in 2015.

Taken from a critical standpoint, Veterinarios sin Fronteras in their article, "Una Politica Agraria Comun para el 1%" (2012) points to the drastic increase in profits gained by particularly agribusiness firms, showing that in the year 1987:

"the top 10 companies in the agribusiness profited in Spain a total of EUR 3,736 and in 2010, they billed EUR 16,824 million. Four and a half times more. The top 10 food distribution companies (supermarkets), billed EUR 4,365 million in 1987, in 2010 it had become EUR 47,041 million, almost eleven times more" (Veterinarios sin Fronteras 2012).

This process of concentration indicates to the development of the Spanish pork sector, first that much economic and political effort has taken place and second, there is a clear indication of a rise in market power. Leal (2016) places emphasis on the differences between Cataluña and Madrid (this is also a very popular thing to do in daily Spanish national political and economic debates). In fact, Leal highlights how "for the second consecutive year, Cataluña has more millionaires than Madrid; 49 to 47" in 2015 (Leal 2016). A comparative approach pulls more attention on the competitiveness of who has more rich individuals or families, rather than how many rich individuals and families there are as a whole. The significance lies in considering the three communities with the greatest number of the richest individuals and families in Spain according to El Mundo (Cataluña, Basque Country, and Madrid), the number as a whole increased from 120 individuals/families in 2014 to 125 in 2015.

In the context of agrifood governance and for the sake of this paper, it is crucial to analyse the levels and degrees of business concentration in the context of already existing and expanding industries, which according to politicians and economists serve as great mechanisms for employment creation. In other words, the concentration of individuals and families. Not only the number of rich individuals and families. This is due to growing corporation consolidation in industrial sectors such as pork production, and evident when analysing firms such as Vall Companys (elaborated further below). Broadly questioning the number of rich individuals and families which continue to increase particularly in those communities which already have existing industries of great value/wealth to the 'nations well-being'.

Analysing this playing ground does give a brief impression of Spanish corporate-state relations, and how this in turn causes contrasts between communities. Since the Leal's (2016) article is placed in a comparative setting, proposals for independence from Cataluña are threatening to Madrid. Cataluña itself holds a remarkable amount of rich individuals and families (as we saw above), causing a clear competitive disparity between the two communities (apart from their historical relations). More so, since the 200 richest individuals and families' total net worth adds up to be 19% of the total GDP in 2015, this means that Cataluña itself is one individual or family away from being responsible for almost a quarter of this concentration.¹

Some might criticise my choice of reference when using El Mundo. Although that is exactly my point. Even those common references which any leftist could critique upon, serve to demonstrate how the rich continue to get richer. Both leftist and rightist newspapers discuss this topic, so it is increasingly becoming a more known fact. Yet, nothing is being done.

To engage with this critically, one needs to understand that in the past five years the financial crisis has taken a massive toll on Spain's political and social landscape. As top-bottom politics keeps pushing for social benefit cuts making salaries and contracts to become increasingly unstable, people continuously find themselves paying more for education, health and other public benefits.

For example, consider European minimum wage levels. According to EUROSTAT, Spain's minimum wage in 2008 was EUR 700 per month, in July 2015 it was EUR 756.7 per month. A total increase of EUR 46.7 in

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¹ In 2015 there are 200 families/individuals which represent 19% of the countries GDP; out of these 200 families, 49 of them are Catalan. For more information look at diagram on 'El Mapa de las Fortunas' in Leal's 'LOS DUEÑOS DE LAS 200 MAYORES FORTUNAS, UN 16% MAS RICO EN 2015'

seven years. During the same time period, Frances minimum wage went from EUR 1,280.07 per month to EUR 1,457.52 per month. A total increase of EUR 177.45. Consider Belgium, with a total increase of EUR 192.22 from 2008 to 2015 (the list goes on) (EUROSTAT 2015).

In 2014 Spain broke a historic record reaching 29.2% of its population being at risk of "poverty or social exclusion." In fact, Spain is the second country with the highest increase in inequality, after Cyprus, and has become 14 times more unequal than Greece and ten times more than the European average (Oxfam 2016).

1.1 Spain's recent pork boom

Since 2010, industrial pork production has rapidly increased. Between 2014 and 2015 Spain's total pig herd increased by 10%. At the same time, between 2009 and 2014, exports grew from 10% to 25% (ADHB 2015). This is evident when "the volume of exports of Spanish pork products to China continues to rise, with an increase in the first half of 2016 of 128 per cent over 2015" (The Pig Site 2016). This research paper aims to analyse agribusiness market and political power in the context of this recent pork production boom in Spain. In particular, my attention will be brought to the 21 companies which form part to complete the Vall Companys Group.

Recent studies have shown how pork production in Spain has rapidly and continuously increased since 2009-2010, particularly for two reasons: first, a rise in international demand has caused pork firms to expand and shift into an exporting industry. In fact, EU export markets have been relatively stable since 2009, whilst non-EU exports have increased from 10% to 25% by 2014. At 2.4 million head in June 2015, Spain had over 170,000 more sows than two years before. During the same period, the total pig herd increased by nearly 10% and is now only 4% smaller than the German herd, the EU's largest (ADHB 2015). Second, this growth can also be perceived through Spain's 2013-2014 profit margin; at higher pig prices than the rest of EU, Spain also experienced one of Europe's lowest production costs (1.64 euro/kg), in part due to lower building and labour costs (ADHB 2015).

However, this is not to say that Vall Companys Group is responsible for all production in Spain, so it is important to be aware that the figures above represent all types of production, from small-scale farmers to large industrious farmers. Therefore, I will be looking at the expansion of Vall Companys Group as a form of growth of industrial pork production; since their future models aim to, "transition into a stage of greater contact with the consumer, without forgetting production at grand volumes and the guarantee of quality at efficient costs" (Vall Company

Group 2010). For this purpose, I hope to have access to data on scales of production such as number of farms, number of herds, total gross turnover, CR4 concentration measures, and state funds and subsidies.

With this premise, this research paper will attempt to answer two linked questions: First, what role does Vall Companys play in Spain's policymaking, governance, and regulation of the pork industry? And second, what are the implications of growing corporate activity in the Spanish food system? In order to answer these questions, I will use Sell's (2009) approach to analysing corporate agribusiness power in three forms: structural power, instrumental power and discursive power. Additionally, as mentioned above, I will take on a Marxist class-based approach to analyse the changing role of the state, and state-society relations.

1.2 Research Questions

- What role do leading pork agribusinesses in Spain play in policy-making, governance, and regulation of the pork industry?
- What are the implications of growing corporate activity in the Spanish food system?
- In the Spanish agribusiness food system, how does power, with a focus on Vall Companys Group, set forth growing consolidation and political power?
- To what extent does corporate power in Spain's food system limit government regulatory powers?

Chapter 2: Theoretical Framework

2.1 Background on global agrifood governance:

This research paper will investigate governance in Spain's agrifood system, understood as part of the contemporary global agrifood system. In recent years two major bodies of literature have introduced new frameworks and analytical tools in order to analyse global agrifood governance. Specifically, I will approach the current production changes in Spain through the intersection of these two evolving literatures in order to better understand what political role the pork industry plays in order

to govern the Spanish food system, in particular, the production of industrial pork (Clapp and Fuchs 2009). As well as, what the implications are of growing corporate activity (Clapp 2009; Fuchs 2009; Howard 2016).

The first body of literature mainly, through a political science and international political economy perspective, identifies "transnational corporations as actors in global governance" (Clapp 2009: 2; Fuchs 2009). More so, this work analyses the roles taken by corporate agribusinesses in the formation and implementation of norms, rules, and institutions. Power, authority and legitimacy are to be key themes in this literature (Clapp and Fuchs 2009; Cutler, Haufler, and Porter 1999; Cutler 1999; Sklair 2002). Doris Fuchs, in her Business Power in Global Governance (2007) investigates if the political power held by businesses, in particular transnational corporations (TNC's), has increased in the globalizing world. Fuchs expands further by analysing this power play through a series of implications of expanded lobby efforts, the impacts of capital mobility, and the elaboration of self-regulations and public-private partnerships (Fuchs 2007). What is really interesting to see in relation to my research paper, is how Fuchs (2007) highlights the role of businesses in framing certain issues, especially in concern to policy-making and public debates. This, as will be elaborated on in Chapter 3, will also form part of my discursive power analysis presented by Sell (2009). Sell's (2009) three forms of power shines further light on Vall Companys role and status maintained in the Spanish pork sector. The three forms of powers consist of: structural power, which "derives from their positions in the [pork industry]"; discursive power, which describes "the potency of the frames that actors use to couch their preferences"; and instrumental power, which describes "access to important decision-making bodies and influence over public-sector actors" (Sell 2009: 188). This will offer an understanding of how Vall Companys Group exercises power in order to change and form part of, Spain's agrifood governance system.

In addition, Howard (2009) analyses consolidation in the global seed industry, through "a rough guideline developed by economists...when four firms control 40% of a market, it is no longer competitive" (Howard 2009: 1270). This places emphasis on both the role and the status maintained by Vall Companys and allows Howard (2016) to understand the complexity of food politics. More so, Howard's (2009) 'agricultural treadmill' introduces a phenomenon which illustrates the need for farmers to join the ongoing global forces in order to keep up with market standards. This creates a cycle which if farmers let go, they risk falling into the gaps of modern society. As more and more farmers, associations and firms join the treadmill, the bigger the treadmill gets, making it an unstoppable force for small-scale farmers. Lastly, 'barriers to accumulation' introduces a transformation in the agricultural landscape, with the urging expansions into new economic sectors and the tendency to 'refashion' agriculture toward a factory model. This will be analysed in Chapter 3: Structural Power.

The second body of literature, engrained in sociology and political ecology, investigates two key elements: first, the implications of growing corporate activity in the food system; and second, "the impacts of corporate concentration and market domination on society and the environment..." (Clapp and Fuchs 2009: 2). Otherwise known as 'externalities', Fuchs (2009) and Howard (2016) identify how growing corporate power affects communities, labour, human health, animal welfare, the environment and has market consequences.

From debates surrounding the three food regimes, McMichael, in The Power of Food (2000) mentions the concept of a global corporate food regime, in which he highlights two particular shifts, or "operating principles" (McMichael 2000), in global food governance. Global corporate regime is defined as a "set of power relations where formal rules and operating procedures are subject to continual contention..." (McMichael 2000: 22). First, globalization has become a higher-order of the development project. Meaning, that development has seen a shift from a nationally centred and organized industrial growth to a globally managed growth; this is a shift from industrial to post-industrial technologies (McMichael 2000: 23). Second, the world is experiencing a shift in political governance. Although, this is not to say that states are disappearing, but rather adapting to a different role. In particular, this shift is constituted by the changes in market governance. Markets have seen a transition from being state constructed to being constructed by "state/multilateral institutions" (McMichael 2000: 23).

McMichael also discusses how the 'globalization project' is in fact embedded in the political reconstruction in including agriculture as a world economic sector (McMichael 2005). McMichael presents an example of a discursive construct, when he emphasizes on U.S Secretary of Agriculture, Ann Veneman, when she claimed to envision a "global agriculture future [where] agriculture policies must be market-oriented...they must integrate agriculture into the global economy, not insulate us from it" (McMichael 2005). This type of language is heavily grounded in the main field of institutional economics, and reinforces the construction of a "world agriculture." With the escalation of northern-subsidized food surpluses and the intensification of WTO liberalization policies, agribusinesses claimed tremendous access to land, labour and markets. Agribusinesses continuously gain access to a more engrained corporate driven food supply chains (McMichael 2005). This, as we will see below, is the case for Vall Companys Group, where livstock integration strategies implemented in the 1970's and 1980's led firms to own from farm inputs to slaughter houses to distribution. The third food regime (2013) has been the process of "consolidating differentiated supply chains into a 'supermarket revolution' (McMichael 2013; 6). This is also furtherly reinforced through Schneider's (2014) *Developing the Meat Grab*, where it is explained how in the combined context of the food security narratives discussed and the political economy of industrial meat development in China, 'meat grabbing' emphasizes both land and water grabbing, "as both context and object of land deals" (Schneider 2014: 625).

I will suggest that current industrial pork systems in Spain, in particular the one of industrial pork production under Vall Companys Group is resembled in Lang and Heasman's (2015) Life Sciences Integrated paradigm. In *The Food Wars Thesis*, Lang and Heasman (2015) present three main conceptual paradigms, which represent an ongoing war between the history and future of food production; and hence propose alternative ways forward, in particular related to food policy and food economy (Lang and Heasman 2015). The three paradigms are: the Productionist paradigm, the Life-Sciences Integrated paradigm and the Ecological Integrated paradigm. The war between the paradigms is that each one claims to provide sufficient production, health and other public benefits to satisfy human, and if I may add, more 'modernly' speaking, economic needs. More so, each paradigm has a different historical, political and social context, in which one, Productionist, and most recently the Life-Sciences, have been developed and reinforced through the changing agricultural political landscape of the 20th and 21st century through post-war reconstruction projects. Consequentially, policy making becomes difficult since policy makers must "sift through the evidence and to give a fair hearing to a range of choices" (Lang and Heasman 2015: 16). Below I engage with the Productionist and Life-Sciences paradigm in order to understand under which one Vall's discourse can be categorized under. I have found the Ecological paradigm to be irrelevant when analysing my findings as Vall Companys does not practice holistic livestock production methods:

3.2.1 Productionist paradigm

Over the past two centuries, the rapid advancement of chemical, transport and agricultural technologies catapulted the industrialisation of food. The Productionist paradigm emerged from changes in the food supply through out the world, moved from "often local, small-scale production to concentrated production and mass distribution of foodstuffs. Such a shift is a defining characteristic of the Productionist paradigm" (Lang and Heasman 2015: 26). With these modifications also came social transformations. The 19th century witnessed an eruption of urban populations, and the social division of food became even more "politically sensitive" (Lang and Heasman 2015: 26). The Productionist paradigm gained power beyond the farm and expanded their political support at the turn of the 20th century, in particular from the 1940's onwards, as a means of post-war reconstruction. Therefore, policies became 'productionist' and profit-led with the overarching aim of increasing food supply

and 'feed' the rising opportunities for food processing. The core argument in the Productionist paradigm is that the purpose of policy is to produce more food and that in doing so, progress, health and well-being will be delivered (Lang and Heasman 2015).

However, by the 1970's it was clear that the Productionist paradigm could not live up to its high standards, and people's health's and wellbeing did not necessarily follow with there being more food, which in turn catapulted a food system which, on global levels, creates disproportions of, for example, meat consumption (Schneider 2014). The problem is the environmental unbalances it causes and its returning effects on all communities around the world, either through diet or the rise of environmental vulnerabilities. More so, Lang and Heasman (2015) critically state that it is "too crude just to produce more food...since food policy is confronted with [and therefore dependent on] oil security, climate change, water depletion, soil pollution...animal welfare and the nature of plant and animal breeding." This however, led to the rise of two strong alternative paradigms, the Life Sciences and Ecological paradigms.

Problematizing the simple definition: "it is a policy to deliver societal goals such as health and food security, not just developing the efficiency of individual farm units" leads me to question whether or not this forms part of the efficiency of the nation, and in fact serves as another sector in the economy, and therefore, the global economy?

3.2.2 Life-Sciences Integrated paradigm

The Life Sciences Integrated paradigm emerged out of the criticisms that rose from the Productionist paradigm. The Life Science paradigm, like the Productionist, has a central focus on producing more food (for example, it continues the expansion of monocultures in combination with genetic modifications (GM's)), and also puts clear emphasis on health as a public objective. However, the Life Sciences paradigm aims to do this through scientific possibilities of genetics and molecular biology (Lang and Heasman 2015: 18). Since the Productionist paradigm was criticized for being too costly and for implementing too many hazardous inputs (most cases being off-farm in puts), the Life Sciences Integrated paradigm sought to still offer the same objectives, but additionally also aim to "remedy a number of its limitations (productionist): from lessening environmental impacts, through improving human health from greater food production, to creating new products with enhanced, yet sometimes contested, health benefits" (Lang and Heasman 2015: 32).

According to Lang and Heasman (2015), under the Life-Science perspective food is seen as a drug. In other words, food is the solution to diseased conditions, "part of a planned, personalized, controllable and systematic

manipulation of the determinants of health and ill health" (Lang and Heasman 2015: 32). Centred in new biological technologies, Lang and Heasman (2015) show that the Life Sciences Integrated paradigm is perceivable through four main scientific/biotechnological advancements: genetic modification (GM), nutrigenomics, nanotechnology, and substitutionism. These advances allow for the manipulation of living materials throughout the supply chain.

This knowledge will allow me to apply various frameworks and tools of analysis to the current situation in Spain. The shift in industrial pork production in Spain marks a new beginning of a new exporting industrial pork industry which functions under classical neo-liberal arguments of employment, production, profit, development, legitimacy, food security and food safety. More so, I will try to gain an understanding to what extent this is also part of the globalization project. In this context I will argue that the increase in pork production is part of the corporate food regime presented by McMichael (2005). Taking on the perspective that the state is not an entity, or a thing in itself that can act for and by itself. Rather, the state is a compilation of forces, balances and capabilities through the practice of agency which allow the state to function (Poulantzas (1980). I will analyse Fox's categorization of political forces: "societal actors" and "state actors" (Fox 1993) through Sell's (2009) power analysis in order to gain an understanding of the environment around the pork agribusiness in Spain.

2.2 State-society relations

In order to frame my own understanding and analysis of the relations between state and society, I will use academics such as Poulantzas (1980) and Fox (1993) to gain theoretical insight of relations between state and pork agribusinesses in Spain. Fox (1993) in his Politics of Food in Mexico, discusses how modern states function under a contradiction: capital accumulation and political legitimacy. With this research paper I will attempt to critically engage this notion by analysing state-society relations through what Fox (1993) calls "societal actors" and "state-actors"; but in this globalized, free world who is society and who is state? Poulantzas (1980) presents the state as "the specific material condensation of a relationship of forces among classes and class fractions" and therefore the state itself does not exercise power, but rather power is activated through the agency of the definite political forces in specific conjunctures (Jessop 2000). I can not examine state-society relations on the basis of Fox's contradiction because it might be possible that in Spain leading pork firms have been increasingly playing both roles of societal and state actors. This problematizes Fox's simple distinction between the two types of actors, and gives rise to be able to analyse this as a relation, rather than a contradiction. For example, one method I will be using will be to investigate whether or not in Spain, owners or presidents of leading pork agribusinesses, in particular those in Vall Company Group, have been increasingly exercising their political power over agrifood governance. If so, then I will argue that the relation between state and society is not one between "societal actors" and "state actors", but rather a balance of forces which sometimes leads to societal actors playing the state actor role, and vice versa. In particular, to this example, I will use Sell's (2009) forms of power to analyse the current relationship between societal actors and state actors. In this context, the societal actors that I will analyse will be Vall Companys Group, and its leading pork firms.

2.3 Methodology:

For this research paper, I will rely on secondary data, as well as my own creativity and imagination. I will be using various methods such as investigating theoretical approaches and paradigms, as for example presented by Sell (2009) and Lang and Heasman (2015), in order to answer my research questions. I have selected Vall Companys Group, a total of 21 firms, the Ministry of Environment, Food and Environment and the European Commission as my units of analysis. Sell presents structural, discursive and instrumental power, which will serve to help me analyse how these particular agribusiness firms exercise certain powers in order to maintain a certain status in the agrifood governance system in Spain, and draw conclusions on the implications of such growing corporate activity.

First, when analysing Vall's structural power, I will examine the 'operational' structure presented by Vall's and accordingly place each firm across the pork supply chain. I critically engage with this and analyse the level of vertical and horizontal integration. Additionally, I colour code the firms according to geography. With this I hope to poke at geographic concentration and strategizing. I will also use Howard's (2009) CR4 concentration measurements from his article 'Visualizing Consolidation in the Global Seed Industry: 1996' and consolidation processes and implications (Howard 2016). I will look at concentration levels of pork production in the European context to get a sense of the environment Spain is functioning in and then proceed to dive into Spain. The CR4 concentration measurements are particular to Spain, as it is firm based (Howard 2009). From initial research, I have discovered that Vall Companys Group has "a completely integrated production and commercial process at all stages, from reproduction, feed production and animal rearing, to slaughter, meat processing, packaging and distribution of the end product, as well as all complementary processes (veterinary pharmacy, integrated logistics, etc.)" (Vall Companys Group 2010). In fact, they tell you themselves. But the critical significance to this has been lost.

This will consist of desk research and dependency on secondary data from EUROSTAT and ALIMARKET data. Much like Howard in his 'Visualizing Consolidation in the Global Seed Industry: 1996–2008' (2009), I examine structural power and consolidation in Vall Companys Group with the assistance of 'information graphics' (Howard 2009). This is quickly and thoroughly described by Howard himself:

"By representing the process visually, information graphics facilitate enhanced cognition...this method is 'pre-attentive processing,' or the capacity of our sense of vision to take in large amounts of information faster than could occur through paying conscious attention...it is far easier to distinguish differences highlighted by color, size, position or other pre-attentive cues than when they are simply numeric, as in a text-based table. Burdens on our short-term memories are also reduced by showing both the whole and the part, or showing overall trends with more specific details...visualization facilitates communication with much wider audiences, particularly those outside academia. Visualizations of data are increasingly (re)produced by newspapers, blogs and other forms of mass communication, for example" (Howard 2009: 1271).

Second, I will thoroughly investigate which ways the agribusiness firms exercise discursive power. This will consist of investigating discourse constructions. In this setting, discourse takes on two forms: first from Vall Companys to the public, done through their online website; and second, from Vall Companys to political and economic bodies as well as pork associations. I will analyse the first form of discourse, and consider their website as a trigger point for public opinion. However, further research on the latter would be a crucial dimension to investigate to further understand these dynamics. I will attempt at connecting Lang and Heasman's (2015) paradigms, specifically Life-Sciences, to Vall Companys discourse on their website (www.vallcompanys.es). My objective is to demonstrate a Life-Science Integrated discourse through posing the following question based on the minimal information given: can discourse be a 'weapon', in a food war context, to promote and demonstrate certain inclinations towards a paradigm?

My reasoning for only choosing to analyse the discourse on their website is how there seems to be a drastic lack of transparency between corporations and firms, and the public, which deviates publics opinion. I believe that the ultimate power lies in the hands of the common people, in the conscious and aware public. An important factor which contributes to this separation and lack of knowledge is transparency levels and how and what information is given.

In this analogy, discourse is like a painter's brush. It is what gives the imagination its physical essence. The brush, much like the discourse, portrays and communicates an individual's thoughts, emotions, ideas and imaginations. Similarly, discourse takes on this responsibility with

words. Both play as bridges, between minds, ideas, ideologies, and physical manifestation, be it in the form of a painting or in the form of discourse. Paintings grasp a unique point of view of reality, sometimes depicting reality very thoroughly and clear, but other times, like seen with Escher's "Ascending and Descending", we are not seeing reality through our own eyes, but rather through the eyes of another. In the same way, when we read upon Vall Companys website, we are shown one form of pork production being executed in a space in which many other forms of production could be taking place. In this context, discourse is very similar to this idea, it is the arm that paints and communicates between the firm and the public. It is the arm that constructs. Very much like Escher, discourse can also be given multidimensional effects so that readers see a never-ending, healthy, efficient, 'environmentally friendly' and productive food system. This website is the only access available to the public for information, making it a trigger point for public opinion. If anybody wants to arrive at any information of Vall Companys they will most likely land on their website first, and/or a few newspaper and journal articles. For this reason, I will only be analysing the website.

Part of this, for example, will be looking at the firms' websites, and analysing how they describe themselves, their missions/objectives and how they describe production mechanisms they practice. As we have seen from the brief examples above, discursive frames are particularly confusing and terms such as "quality", "safety" and "quality" can mean different things to different people in different contexts (Sell 2009). This paper will examine how discursive power is exercised in different ways. Additionally, Fuchs (2009) observes that in the retail sector, firms are more and more adopting the roles of the traditional authorities. I will use discursive power and the couching of preferences to demonstrate that Vall Companys has, to some degree, replaced traditional authorities. Specifically, the roles of 'expertise' and 'health authorities'. Therefore, this points to a direct change in the role of state. Since where the state was present before, now is handled by private companies.

Lastly, when investigating instrumental power, I will critically analyse the Common Agricultural Policy (CAP), and along with Veterinarios sin Fronteras (2012) argue that the CAP mainly serves to reinforce highly consolidated, profit-led agribusiness firms, the top 1%. Disparities between farmers in the European Union in terms of income support will demonstrate how in fact this policy supports more large-scale than small-scale farmers. This aspect of instrumental power serves appropriately in order to gain insight on the expansion of the industry through the perspective of policy agreements. I will engage with CAP's subsidies derived from Veterinarios sin Fronteras (2012) and demonstrate that Vall Companys is a privileged beneficiary amongst 22 million farmers and agricultural workers (European Commission 2016), and therefore

receives an abundant more 'support' in comparison to small-scale farmers. This will also shine light on CAP's central Pillars, which has been divided into direct payments and rural development.

The creations of agreements and future developments, consist of the coming together of great numbers of individuals, associations, firms, scientists, pharmaceutical companies etc. Therefore, it makes me question the bias with which decision makers, make decisions. As Lang and Heasman state, "it can involve people and organisations who may not even call themselves policy-makers" (Lang and Heasman 2015). With this, I introduce Dal Bó's (2006) notion of regulatory capture, which is the idea that regulation ends up being captured by the firms it is supposed to discipline (Stigler 1971) because observers of regulatory procedures challenge the perspective that regulation is needed to prevent firms from exercising market power (Dal Bó 2006). With this, I will attempt to demonstrate how regulation becomes captured in two different ways in Valls context. First, through firms adopting the role of protectors of the consumers, and two through the revolving door concept, which describes the biases in decision making. For example, someone who comes from an industrial background, is more likely to favour pro-industrial policies.

Besides from doing a power analysis, I will also base them with the premise taken from literature that discusses the role of the state, which can be applied to the globalization of agrifood governance context. It is important to understand the role of the state, and different definitions of the state in order to gain understanding between state and society. For example, whilst the Marxists class-based approach looks at the state as an instrument of class formations, for Poulantzas this was too shortsited. Poulantzas (1980) argues that the state is in fact a formation of different materials and relationships of forces amongst different class fractions (1980). Additionally, Jessop argues that the state does not have power itself, but rather power is activated "through the agency of definite political forces in specific conjunctures" (Jessop 2007). In order to problematize Fox's (1993) political forces ('societal actors' and 'state actors'), I will use Sell's (2009) forms of power to analyse if such forces are in fact so simply divided in the context of Spain. Or if in fact the line between societal actors and state actors has disappeared.

Chapter 3: Analysis of Power

3.1 Structural Power

Founded in 1956, Vall Companys was initially established by two brothers, Jose Maria Vall Companys and Antonio Vall Companys, when they acquired La Meta, in Lleida, looking to expand into flour production, with further intention of moving into the feed sector. From here, Vall Companys set forth a model of production which today has become a super power in the Spanish agrifood sector. This model, although based on 'off-farm inputs', is seen essential to Vall Companys growth and expansion. This model functions as follows: with a total network of 2,100 associated farms today, the idea is that farmers' input is the farm (land and water) and labour, while Vall Companys is in charge of supplying the farmers with piglets, feed, veterinary services, and wages (Casas 2015). Essentially, one of the major changes that constituted the livestock integration in Spain was the insertion of global productionist schemes during the 1970's-80's. At this moment in time, productionist schemes were particularly embedded in post-war reconstruction of Europe and was declared the way forward for its immense capacity to produce an abundance of food supply. One of the first steps in the process of livestock integration was the expansion to produce livestock feed, which was quickly reinforced after the fall of the Franco dictatorship, when Vall Companys in 1977 acquired Gepesa, a feed firm based in Barcelona. After this expansion, Vall Companys also developed Mevet, Vall Companys pharmaceutical and veterinary provider.

From a critical standpoint this vertical integration process has constructed a wide process of consolidation for Vall Companys and others, which, as I will be demonstrating, now covers the production from farm inputs to feed to the production, slaughterhouses, processing/packaging facilities, and marketing, all under one official firm. In 1993, Vall Company intensified and acquired Agroturia, enhancing their livestock production and feeding capabilities. This lead to an increase in livestock production, in particular pork and poultry, which lead Vall Companys to expand in 2001, acquiring slaughterhouses such Patel, Frivall, and Frimancha Costa (Banyoles), Torrent (Mataró), Rubiato Paredes (Madrid), Avicosan (Cornellà de Llobregat) and Dolz (Algemesí) (Casas 2015).

After a generation, the firm was passed down onto Josep Vall Palou's through heritage from Jose Maria and Antonio Vall. Although, after Josep Vall Palou's death on the 20th of October 2015, 50% of Vall Companys was inherited by his three children (Josep, Oscar, and Meritxell Vall Esquerda), and a great deal went to Josep Palou's right hand man, Josep Pedros Riasol. After buying Ramon and Josep Maria Vall Pla's part of the company (cousins of Josep Palou), Josep Riasol reigned along side Josep Palou for 15 years, since the year 2000. In total, Riasol paid 138 million

euros for 50% of the firm. This marked the turning point for the company, as most of the managerial power shifted into the hands of Riasol, and with the capability of forming associations such as Jamones Duriber he has had access and acquired Jamones Nicolau, 25% of Jamones de Alto Aragon and in 2014 obtained 28% of Comapa (Lamelas 2015).

The information above only paints part of the picture. The section that follows critically examines Vall's 'operational' structure, consolidation levels, and concentration measurements on both European and national levels. The analysis is based on Sell's (2009) power analysis of transnational corporations (TNC's) and their growing ability to influence the rules which supposedly governs them. Sell's three forms of power allow me to map out where Vall Companys exercises power in order to influence the rules which they themselves must play by (Clapp 2009).

Sell (2009), presents structural power as a form of power, firmly embedded in the corporations' "position in the seed industry" (Sell 2009: 188), which increases their profitability and political power. Accessibility to the seed industry is also explained as a balance between commercial vs humanitarian objectives/obligations and highlights how major biotechnological breakthroughs have created huge business opportunities. By analysing strategic partnerships and extensive cross-licensing, Sell concludes that global biotechnology firms have played a prominent role in the effort to raise regulatory standards (Sell 2009: 190). In the niche that is the Vall Companys pork sector, I will analyse strategic partnerships, as well as I will attempt to add one more key component to Sell's (2009) two key factors driving consolidation.

The initial point of this research was to navigate through the available websites, and understand the simple logistics of the group. Critically, I looked for structure, the composition of the group. Vall Companys Group adds up to a total of 34 firms, horizontally operate across four different sectors, and are vertically integrated throughout every stage of the supply chain. As my interest lies in the pork sector alone, I had to differentiate between firms, and concluded that the pork sector includes a total of 21 firms, out of 34. Although, with some investigation, I had found a diagram which organized by the firm itself. Although this was slightly confusing because there are firms operating in multiple sectors. Below, Image 3.1 reveals the "operational structure" presented on Frimancha's website. Interestingly enough this diagram is not on Vall Companys official website. Only by navigating through other websites was I able to find this (link given under Image 3.1).

HARINAS PANIFICABLES **CARNE DE CERDO CARNE DE POLLO** CARNE DE VACUNO COMERCIALIZA-CIÓN DISPORAVE ELABORADOS Y CURADOS CO STA torrent INDÚSTRIA CÁRNICA PRODUCCIÓN GANADERA **molisur** ALIMENTACIÓN ANIMAL Afrivall s.J. FARMÁCIA VETERINARIA LOGÍSTICA Y COMPRAS cegeco

Image 3.1: Structure - Operational Model presented by Valls Companys:

Source: http://www.frimancha.es/index_es.html

The structure presented in Image 3.1 sets forth the four different sectors in which Vall Companys Group is also horizontally integrated in; pork, poultry, beef and flours/grains/feed. Vall Companys has also horizontally integrated, having a crucial status in the poultry, beef and grain sectors. In fact, according to a study conducted by Brown (2012) for the UECBV Conference in Brussels, titled 'Structure & Dynamics of the European Meat Industry', in 2010 Vall Companys ranked fifth largest beef and veal producer and second largest poultry producer in Spain. We see high levels of concentration across various sectors. On the left (in grey), we are presented with a list of categories used to be able to allocate each company in its corresponding sector of the supply chain. Research on these companies has helped me arrive at the understanding that if this chart were to be analysed as a commodity chain, the process would begin at the bottom; including Transegre, Cegeco (Logisticas y Compras - Logistics and Sales) Mevet, and Vall's Commercial Group (Farmacia Veterinaria - Veterinary Pharmacy) and moves up the chain. Although, note that the first two stages (Logistics and Sales and Veterinary Pharmacy) are 'off-farm inputs' (Howard 2009), and the farm stages of the chain begin at 'Alimentacion Animal' (animal feed) and 'Produccion Ganadera' (livestock production) (third and fourth grey bar). Firms are allocated correspondingly, and some overlap (indicated by the transparent dark grey bars) as is the case again for Transegre and Cegeco. This already points to an interesting detail, only four companies are in charge of the first two off-farm input stages of the supply chain. That is four out of 34 four sectors (pork, poultry, wheat/grain/feed) in Spain's number one pork producing firm. This carries a lot of density.

Research and critical analysis points to the confusion created by the operational structure presented in Image 3.1. Vall Companys Group at first glance seems to be a platform where agribusiness firms with their own autonomy, come to do 'business as usual'. However, after mapping out the firms involved in the pork sector, I quickly came to the realization that their 'operational structure' is in fact a hierarchical one. Below, I reorganized the firms structure, so that it becomes clear who the big players are, with the intention of introducing an argument of high levels of consolidation and vertical integration. I combine structure with chain.

Vall Companys Group Off farm inputs Slaughtering and Debon-Marketing Production Frimancha (deboning pork and Duriber (Serrano products and cured Agrocesa (livestock Vall Com Dispo rave (lo-gistics egre (logistics and transport ceutical industry) (Lleida) produc-tion and S.A. (slaugh-terhouse and debslaughter beef) (Cuidad Real) AND Paand tion and integration) (Valladolid)
AND Agroturia (production and integration) (Valencia)
AND Afrivall (livestock prostock prostock prostock) sales) (Valen-cia) AND) (Lleida) AND AND Ce oning) (Lleida) AND AND (prime ical goods pur-AND Frivall (slaugh-terhouse and chase) (Lleida) cine dis-AND Jabugo (Elabora tion of (Lleida) deboning) stock pro-duction) (Cuenca) AND AND Nu ucts (ICP) (distribution of pork) (Za-ragoza) AND cerdo iberico) AND

Figure 3.2: Operational Structure reorganized: combing structure with chain

Figure 3.3: Commodity Chain of Valls' pork production with firms allocated in their corresponding nodes

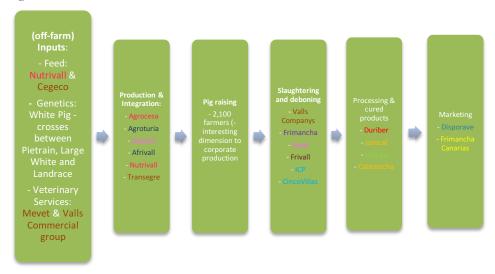


Figure 3.2 and 3.3 together represent the hierarchical structure and supply chain of Vall Companys Group. The hierarchy that exists is due to Vall's control over all other firms.

With Figure 3.3, I get rid of the hierarchical structure and allocate each firm to its corresponding position in the supply chain. This is an important aspect because it demonstrates strategic alliances and strategic operational methods that facilitate and lubricate the functionality and development of Vall Companys Group.

This attempts to articulate a few things: first, as briefly mentioned above, Vall Companys Group presents itself as a business group, and at first glance at Vall's' website makes the impression that this is a platform created for all these agribusiness firms to gather to do 'business as usual'. When I dove deeper, I discovered that it is a 'group' due to the simple fact that Vall Companys 'Group' has slowly been acquiring all of these firms over the past four decades, immediately indicating big consolidation levels. This was particularly clear when I tried to gain access to the firms themselves, and discovered that some don't even have their own websites. In fact, only 11 out of the 21 firms in the pork sector have websites. The lack of websites is a sign of heavy consolidation processes.

Second, drawing influential significance from Philips Howard's power of information graphics (Howard 2009), a clear visual of the structure of the group makes it obvious that Vall Companys has been organized and developed through gaining ownership of the entire supply chain of its pork production, signaling maximum vertical integration efforts. Vall Companys owns the process of inputs, feed production, all the way

through to production, slaughtering, deboning, packaging and marketing.

And last, this demonstrates a large network of strong corporate alliance building in the agrifood sector in Spain, and as we will see below, the European Union. As seen through Sell's (2009) *Corporations, Seeds, and Intellectual Property Rights Governance*, one major factor which leads to such levels of consolidation is "strategic partnerships" (Sell 2009: 190). This leads me to three crucial findings which will be explained through Howards' (2009) explanation of 'barriers to accumulation', 'agricultural treadmills', and 'consolidation'.

3.1.1 'Barriers to Accumulation'

Agriculture, being the most resistant sector to the 'capitalist logic of accumulation', Howard (2009) introduces the idea of barriers to accumulation in order demonstrate and recognize how agriculture has become a sector of the economy, and therefore concentrates on "transforming capital-as-money into capital-as-commodities, and subsequently transforming this into larger amounts of capital-as-money" (Howard 2009: 1267 and Heilbroner 1985). Being prone to so many vulnerabilities, agriculture has become a risky sector in which to seek profit, especially in comparison to durable goods. This leads Howard (2009) to observe two tendencies: first, that accumulations processes requires expansion into new economic sectors; and secondly, large-scale producers seek to reduce these risks and tend to 'refashion' agriculture toward a factory model. Almost turning the production of agriculture, of food, of health, of social relations, and more into a set of durable goods, with the intention of maximizing profits.

What does this mean for Vall Companys Group. With the message derived from the information graphics above (Image 3.1, Figure 3.2 and Figure 3.3), we see the dynamics brought up by Howard (2009) at play. Two tendencies are identifiable: first, accumulation of capital-as-money, through the transforming of capital-as-money to capital-as-commodity, otherwise known as a capitalist firm, is observed as the process and development of Vall's has clearly expanded into new economic sectors, such as grain and feed, pharmaceuticals, and marketing. Keep in mind this is not only the case for the pork sector, horizontally, it also includes the poultry and beef sectors, signaling high levels of strategic patnerships. Second, the tendency to 'refashion' this agriculture toward a factory model has also taken place. A glance at Image 1.1 in the introduction there are no signs of traditional, holistic forms of agriculture. Rather, it has transformed into a 'factory-ized' pork production system. It is a new fashion state of agriculture which transforms pigs into pork, farmers into workers, and calories and proteins into profit.

3.1.2 Agricultural Treadmills

The premise of the agricultural treadmill lies in Willard Cochrane's (1958) explanation, in suggesting that since food is relatively inelastic, meaning that demand will stay relatively the same whether prices drop or rise. Any rise in production will create surplus and reduce prices. In the context of pork producers, the powerful stay on the treadmill and it could be argued that they in fact lead the treadmill, while others, if not the majority, must constantly increase yield in order to maintain the same income, and some can not join at all. In other words, Howard's (2009) 'agricultural treadmill' introduces a phenomenon which illustrates the need for farmers to join the ongoing global forces in order to keep up with market standards. This creates a cycle which if farmers let go, they risk falling into the gaps of modern society. As more and more farmers, associations and firms join the treadmill, the bigger the treadmill gets, making it an unstoppable force for small-scale farmers. Treadmills are about the creation of perpetual motion, often through the creation of new problems in the attempt to solve old ones. Again, this shines light on the interesting dynamics of the 2,100 'associated farms' in which further research could put forth a critical demonstration of social and economic relations at play between farmers themselves, and between farmers and industry.

In addition, Howard (2009) highlights how the recent adoption of the 20th and 21st century agricultural technologies may result in more, additional treadmills. He introduces the most well-known one, the pesticide treadmill. However, I will adapt this to the context of Vall Companys and pork production in Spain, and introduce the antibiotic treadmill, which can be categorized as the prophylactic use of antibiotics, by three intentions: first, disease prevention; second, treatment of already sick animals; and third, for growth promotion also known as Antimicrobial Growth Promoters (AGP) (OECD 2015). However, it is important to mention that AGP has been banned in the European Union.

Bacteria's rapid capacity to self-generate causes a major threat to large-scale production sites, so the use of antibiotics is not only inevitable, but also encouraged by state, health, and sanitary professionals. However, in this process of self-reproduction the bacteria divide and multiply, creating an antibiotic resistance, since in every division there are DNA errors. In other words, mutations are formed. With mutation rates almost as rapid as self-generation rates, the bacterial colony is hardly ever the same. In its simplest terms, and since I am no expert, this is the principle of antibiotic resistance. The idea is that the antibiotic treadmills encourages the prophylactic use of antibiotics, whichlarger applications of antibiotics for three reasons: due to the antibiotic resistance developed in the bacterial DNA, to combat already sick animals and to serve as a growth promoter. Since AGP has been banned in the EU, it is difficult if not almost impossible to conclude that Vall Companys uses antibiotics

for growth purposes. However, in the context of Vall's 2,100 associated farms, what can be questioned and researched is access to antibiotics and the how much antibiotics are used by farmers. Clearly, access to antibiotics secures a higher yield in a large-scale environment prone to disease break outs. Further research could show conditions of a farmer's farm and pigs which do not use antibiotic (if this exists anymore), or exercises minimal use of antibiotics purposes and one which promotes heavy doses of antibiotic use. Maybe these dynamics don't even exist, it is also possible that all 2,100 farms have equal access to antibiotics. However, this raises another question, what repercussions does this have on small-scale pork producers?

3.1.3 Consolidation

Agribusiness firms such as Vall's, as we have seen above, tend to consolidate. In addition, we see the development of the pork industry, and are able to identify that by 2015 the playing field has transformed into an oligopolistic environment dominated by a small number of large firms (Howard 2009). Is this process inevitable, we might ask? No, constructed on the basis of accumulation logic, it is important to draw attention to the fact that this is a process which expands when "differential market success accrues additional advantages to leading firms (such as economies of scale) that snowball into even greater market success (often at the expense of other competitors)" (Howard 2009: 1270). The outcome, as well as the consequence, is a highly concentrated and controlled environment, which can reach a point in which the "largest firms are able to ensure stable profits by ceasing to compete on the basis of price" (Howard 2009: 1270). Spain also experienced one of Europe's lowest production costs (1.64 euro/kg), in part due to lower building and labour costs (ADHB 2015), which incentivized/es the expansion of production.

Below, I analyse concentration levels of pork production in the European context for both 2014 and 2015, in number of pigs and total carcass weight equivalent (cwe) in '000 tons. This is to get an understanding of the existing European environment in which Spain finds itself playing an active and large role in. Then, diving into Spain, I specifically use CR4 concentration measurements, as it is firm based (Howard 2009). From initial research, I have discovered that Vall Companys Group has "a completely integrated production and commercial process at all stages, from reproduction, feed production and animal rearing, to slaughter, meat processing, packaging and distribution of the end product, as well as all complementary processes (veterinary pharmacy, integrated logistics, etc.)" (Vall Companys Group 2010). In fact, they tell you themselves. But the critical significance to this has been lost.

Concentration in Europe:

In the European context, an analysis of 2014 and 2015 not only allows us to see the biggest players in a large economic union, but allows for fluctuations to be identified. Table 3.4 demonstrates the percentage of EU concentration levels in total number of pigs. Germany, Spain, France, and Denmark were selected because they have the largest pig population in 2015. In a union of 28 countries, I discover that in 2014, the top four pork producing countries have 54.5% of total number of pigs. In 2015, this increased to 55%. In other words, in 2015, four countries had 82.028,76 pigs out of a total of 148,330.44 pigs in the EU.

Table 3.4: Total number of pigs for 2014 and 2015 in the top four pork producing countries

Countries	Number of Pigs 2014	concentration	Number of Pigs 2015	concentration
Spain	26,567.58	18%	28,367.34	19.1%
Germany	28,338.99	19%	27,652.42	18.6%
Denmark	12,709.00	8.56%	12,702.00	8.5%
France	13,300.00	9%	13,307.00	9%
Others	67,414.97	45.4%	66,695.43	44.8%
Total	80,915.57	54.5%	82.028,76	55%
EU (28)	148,330.44		148.724,19	

Source: http://ec.europa.eu/eurostat/tgm/table.do?tab=table&plugin=1&language=en&pcode=tag00018

First, Spain's total pig population decreased from 26,061.23 in 2007, to 25,250.38 in 2012. However, Spain quickly recuperated and in 2015 had a total population of 28,367.34 pigs. Second and most significant, is the fluctuation in total number of pigs between Germany and Spain from 2014 to 2015. Further data from years to come would indicate if this fluctuation is indeed a rise in Spanish pork production. Spain increased their herd from 26,567.58 in 2014 to 28,367.34 in 2015 and a rise from 18%-19.1% in concentration. In the contrary, Germany experienced a decrease in concentration from 19% to 18.6%. Yet, this consists of a downfall from 28,338.99 pigs in 2014 to 27,652.42 in 2015 (EUROSTAT 2016). This is furtherly seen by Figure 3.5 in the Appendix, which visually demonstrates it. Although, no conclusions can be made, because this fluctuation might be caused by an exterior cause such as a disease in German production sites, rather than an expansion in Spain's industry. This offers a critical observation for years following years to come.

In Table 3.6, I repeat the same method as above, yet I apply it to total cwe in '000 tons. Here, there is a slight change in countries, and Poland replaces Denmark because I wanted the top four producing countries in '000's tons cwe. Again, with the same method and same years, I discovered that there was no significant change between 2014 and 2015. Yet it still demonstrates a highly concentrated environment, since in 2015 the

four countries produced 58% of the total cwe in '000 tons in the European Union, a total of 13,331.57 tons out of 22,957.82 tons.

Table 3.6: Total '000 t cwe for 2014 and 2015 in the top four pork producing countries

Countries	Total '000 t cwe 2014	concentra- tion	Total '000 t cwe 2015	concentra- tion
Spain	3,620.22	16%	3,895.85	17%
Germany	5,507.00	24.8%	5,562.00	24.2%
Poland	1,838.46	8.3%	1,906.11	8.3%
France	1,943.55	8.8%	1,967.61	8.6%
Others	9,233.22	41.6%	9,626.25	42%
Total	12,909.23	58.3%	13,331.57	58%
EU (28)	22,142.45		22,957.82	

Source: http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tag00042&plugin=1

Concentration in Spain

To begin to question the Spanish pork producing niche for also being highly concentrated, Brown's (2012) report for the UECBV Conference in Brussels, titled 'Structure & Dynamics of the European Meat Industry', includes pork, poultry, beef and veal in his study. However, drawing from his discoveries on European pork producers, Figure 3.7 in the Appendix shows the levels of concentration within the top five pork producing countries in cwe and concludes that concentration continues to increase due to forces such as retailer concentration and internationalisation, diseases, and horizontal and vertical consolidation of slaughter groups (amongst more). In Vall's context, horizontal and vertical consolidation of slaughter groups is identified through the merging of deboning and processing firms of Patel, Cincovillas, and Frivall, which function under the same umbrella, and share a single website.

One of the difficulties of my research was gaining access to data about the biggest pork producers in Spain. In fact, the data in Table 3.8, in concern to gross turnover, is data which I had to purchase from ALIMARKET. However, Brown's (2012) findings directly point me in a constructive direction in laying out Vall Companys, Grupo Batalle Juia, Jorge, El Pozo, and Frigorificos Costa Brava, as the leading pork producers in cwe '000 tons in Spain (in that order). Following Howard (2009) CR4 measurements, which states that "a rough guideline developed by economists is that when four firms control 40% of a market, it is no longer competitive," (Howard 2009: 1270 and Heffernan 1999) I narrowed down the five companies to four. That being the case, and having no access to any 'free' data, I had to purchase data from ALIMARKET. I analysed each firm's gross turnover. In doing so, I narrowed the five firms given above,

to the following four, in corresponding order: Vall Companys Group, El Pozo Alimentacion, Jorge Group, Frigorificos Costa Brava, as seen in Figure 3.8.

Figure 3.8: Gross Turnover; CR4 concentration of top four pork producing firms in Spain in million EUR

Name of Com- pany's	Gross Turn- over 2014 (MILL EUR)	Concentration (CR4)	Gross Turn- over 2015 (MILL EUR)	Concentration (CR4)
Vall Companys Group	1,353,67	23%	1,400,00	24,7%
El Pozo Ali- mentacion	941,76	16%	965,28	17%
Jorge S.L. Group	537,31	9,10%	627	11%
Frigorificos Costa Brava	373,98	6,30%	367,78	6,50%
Other Producers	2,679,48	45,5%	2312,64	40,8%
Total of 4 company's	3,206,72	54,50%	3,360,06	59,23%
Spain	5,886,2		5,672,70	

Source: Alimarket and MAGRAMA

These findings demonstrate that Spain has not only developed an oligopolistic agribusiness environment in the pork sector, but in fact shows signs of a continious consolidation process. My findings indicate several things. First, Vall Companys controls 24,7% in 2015 of the industry, almost a 2% increase from 2014. Second, even though Spain's total gross turnover went down by more than 200 million EUR, total concentration levels for the four company's increased almost a total of 5%, from 54,5% in 2014 to 59,23% in 2015. A highly consolidated supply chain within Vall's, and a low competitive environment controlled by only a few large firms in the Spanish pork industry. There are no signs of slowing down. From 2014 to 2015, Vall Companys had a 46.33 million euro increase; El Pozo a 23.52 million euro increase; Jorge Alimentacion an astounding 89.69 million euro increase; and lastly Frigorificos Costa Brava, which experienced a loss of 6.2 million euros.

Next, in relation to the integration discussion above, I briefly look deeper at Vall's horizontal integration, and analyse concentration within, with the intention of answering which sector (pork, poultry, beef) is Vall Companys more invested in, in terms of quantity produced. Vall's produces: 310 thousand tons of pork, 115 thousand tons of poultry, and 15 thousand tons of beef.

From this, I present a pie chart demonstrating which sector is bigger on a basis of production. Almost ¾'s of Vall's meat production, is pork production and produces almost 21 times more in thousand tons than the beef sector, and two and a half times more than the poultry sector.

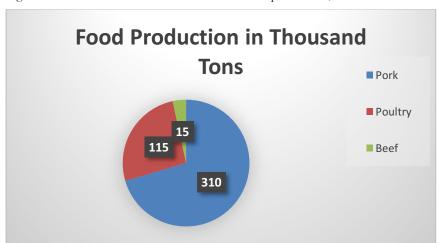
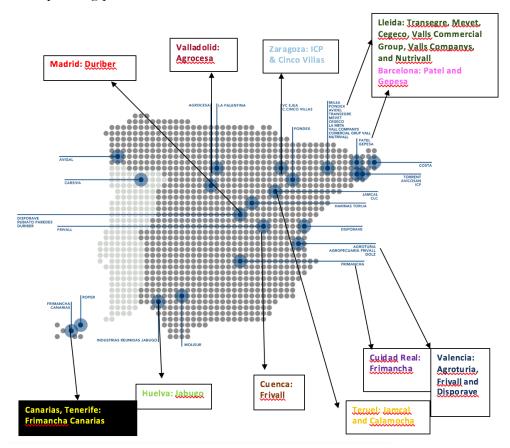


Figure 3.9: Horizontal concentration in Vall's food production; in '000 t.

Geographic concentration

Additionally, in both Figure 3.2 and 3.3 each firm has been color coded on the basis of geographic location. My intention with this is to add to Sell's (2009) key factors driving consolidation. Along with strategic partnerships and extensive cross licensing, I believe geographic concentration also plays a key role in driving consolidation. Much like geopolitics plays a key role in both international and national politics, geographic concentration is a key factor in "accru[ing] additional advantages [which] lead firms (such as economies of scale) that snowball into even greater market success (often at the expense of other competitors)" (Howard 2009: 1270). Consider the following map:

Map 1: Map of Vall Companys activity in all four sectors; marked in color for corresponding pork sector



Source: http://www.vallcompanys.es/

<u>Color Key</u>: Dark Blue: Valencia; Yellow: Canarias, Tenerife (black background is given to show contrast with yellow); Red: Madrid; Orange: Teruel; Neon Green: Huelva; Purple: Cuidad Real; Pink: Barcelona; Brown: Cuenca; Light Blue: Zaragoza; Dark Green: Lleida; Maroon: Valladolid

The map itself is taken from www.vallcompanys.es, which explains the little blue text, as that is representative of all firms across all sectors. From that, I dragged out the firms from the pork sector, and color coded them. After mapping out the group I discovered that out of 21 firms, there were 11 colors. Meaning, 21 firms operating in 11 different geographic locations. From a critical perspective, this raises the question of why, and what are both the benefits/incentives for this, and consequences?

For example, consider Frimancha Canarias. They play as a pillar for all of Vall Companys in the island region. There is one Frimancha distribution office in Canarias, and no official Canarias Frimancha website. Only the

official Frimancha website exists and Frimancha Canarias is not mentioned anywhere. Either way, we are left to assume that one office is in charge of receiving the deliveries from the peninsula, and that same office is then also responsible for distributing it around a few or all seven islands. At a distance of about 2000 kilometres from the main peninsula and a market population of 2.1 million citizens, it is strategically 'efficient' for Vall Companys to have a major distribution office in the Canary Islands. Furtherly supporting my argument that Vall Companys' horizons have expanded beyond geographic limitations. This raises another question which would need further research: what does this mean for the rest of pork production in the Canary Islands?

3.2 Discursive Power

With the overarching objective to understand how Vall's "couches their preferences" (Sell 2009: 188), I attempt to understand how discursive power influences the status of agribusiness firms, such as Vall's. Therefore, I pay close attention to how discursive power influences public opinion. I relate Lang and Heasman's (2015) paradigms to the discourse used on Vall's website, and connect the Productionist and Life-Sciences paradigms to Vall Companys discourse used on www.vallcompanys.es (Table 4). My objective is to demonstrate, what I will call a, 'lifescience discourse', through posing the following questions: can discourse be a 'weapon', in a food war context, to promote and demonstrate certain inclinations towards a paradigm? On the basis described in my methodology, I hope to demonstrate how discourse also forms part of the food wars, and is a weapon which triggers social behaviors, in this case, triggering public opinion. In addition, I will analyze terms such as quality, safety and efficacy, which are particularly used by Mevet to promote biotechnology, Vall's only pharmaceutical company.

Sell (2009) presents three ongoing debates about the use of genetically modified organisms (GMO) in agricultural practices. Discusses the arguments for and against and explains how "if no *one* discourse emerges as more persuasive or decisive, then instrumental and structural power are more likely to carry the day" (Sell 2009: 197). Pointing to the importance of understanding from which context discourse originates from, Sell (2009) explains how terms such as "food security" have different meanings to different people. To some it might mean higher yields and pest resistance. To others however, it might mean organic farming methods and preservation of biodiversity.

To use this form of analysis in the context of Spain's pork boom, I will apply it to pork production scheme debates and how a 'globalized, industrial' shadow trickles down upon individual countries, regions and even

farmers, forcing them to join, as we saw above, in 'agricultural treadmills', tied to 'off-farm inputs' (Howard 2009). In today's mainstream agribusiness governance, agriculture is to be established for the advancement of national development, as its own profit-led sector of the economy. In fact, today the pork sector represents 34,2% of final live-stock production, and 12,4% of final agriculture production in Spain (MAGRAMA 2011). This demonstrates a pillar in the Spanish economy, and demonstrates to serve not only for agricultural purposes (health, nutrition, etc.) but also as an economic project looking to boost Spain's economy.

In addition, Lang and Heasman (2015) make reference to 'recombinant DNA biotechnology' or genetic modification when describing the revolutionary technological shift in the process of food production. More interestingly so, the rippling effect has caused, what some claim to be irreversible, major changes in the economics and politics that surround and transform the social dynamics of agriculture/food production (ETC Group 2013). This is particularly seen through demographic transformations of urban concentration, causing a shift from local small-scale agriculture (in the hands of many) to concentrated large-scale production and distribution sites (in the hands of a few).

Contextualizing this in the Spanish food system and more so bringing it to Vall's niche, an analysis of the formation and consolidation (as seen in structural power) demonstrates how Vall Companys hopped on the agricultural treadmill during the second half of the 20th century, and continues to serve the modern, industrial, technological political-agricultural landscape. Discursive power will then highlight how Vall's adapted and penetrated into the Life-Sciences paradigm, and now uses discursive power to cushion their methods, consequentially triggering public opinion to accepting this form of production. The creation of Mevet, and phrases such as, "MEVET is the distinguishing element that enables us to ensure a proper design of medicines with total guarantees of QUALITY, SAFETY and EFFICACY both in national and international market" (Mevet 2016). Please note, I did not capitalize the key words.

In Table of the Appendix, I organize and present discursive 'cushions' used by Vall's based on Lang and Heasman's (2015) Productionist and Life-Sciences paradigms. With this, I hope to demonstrate how discourse is used as a strategy, or weapon, to continue the snowball advancement of the industry, and agribusiness firms as such. Discourse shows how advances in biotechnologies are quickly transforming food production methods, in particular food handling and consumer products (Lang and Heasman 2015: 32) as firms rapidly expand into record territories. I present characteristics of the paradigm, and then give quotations directly

taken from www.vallcompanys.es which demonstrate a clear relationship. Lastly, I present crucial Life-Science methods, and also present quotations which directly relate to the method indicated.

Table 4 demonstrates a clear depiction of which side of table Vall Companys sits at in todays 'food wars'. With its essence embedded in increasing food supply through biotechnology, Vall's discourse is framed in a Life-Science paradigm fashion, revealing aspects of their expansion and use of biotechnological advancements. For example, the capacity to construct its own centre for artificial "insemination of pigs (in Lleida), to totally guarantee full genetic control" (Vall Companys 2016) is both a sign of expansion at a structural level as well as at a biotechnological level. This scenario illustrates that an advancement in biotechnology enhances the capability of Vall's to consolidate and integrate even further.

More so, in this context terms such as 'quality' and 'safety' are used as a weapon, to 'convince', the public that this is the most efficient, healthy, and environmentally friendly form of production, "in an effort to create a loyal and stable customer base" (Fuchs 2009: 38 and Burch and Lawrence 2005). We see this in phrases like: "Vall Companys Group invested in quality and health control in a market that prioritized and demanded food safety" (Vall Companys 2016). Like Sell's (2009) observations, both quality and safety might have different meanings in different contexts. Such that quality for some is concerned with appearance, and for others it is about nutrition and diversity. Similarly, safety for some can be a matter of yield, and for others it might mean organic farming methods. Unaware that other forms, or paradigms, to pork production exist, the public possibly lacks critical knowledge of the modern agribusiness governance system. Falling into a vacuum skewed by discourse constructions, like on Vall's website. This is not the public's fault, rather it is a consequence of the lack of transparency in the structural development, as well as of accumulation, integration, and consolidating processes in Vall Companys. In fact, Vall's presents a link of 'traceability' where the intention is for one to see the process and one can trace your product through the chain. Although, upon pressing the link, we are directed to the following image in Appendix (Image 4.1)

Analysing one of the most powerful actors, Fuchs, Kalfagianni, and Arentsen (2009) review how and for what purpose is discursive power deployed, in a retail corporation context. First, it is observed that food retailers represent themselves as the "guardians of consumer interest..." (Fuchs 2009: 38 and Burch and Lawrence 2005). However, I have identified that in Vall's context, this goes beyond the retail niche, and becomes a business ethic for the entire group. Giving the impression that consumer interest is priority, in phrases such as: "Vall Companys Group's feed is one of the mainstays of its meat production, and represents a guarantee of quality in the final product for the consumer". Note, the

quote above is taken from Vall's main website, not a retail website like Frimancha Canarias or Disporave.

Second, Dixon (2007) observes that retailers are replacing traditional authorities (government) in order to "promote their own authority based on charisma and claims to expertise..." (Fuchs 2009: 38). This points to the changing role of the state in private, family, agribusiness firms such as Vall's where high levels of consolidation and integration make it more challenging for traditional authorities to have a presence in the governance of Vall's. Also, quotes such as:

"the human team is the main force that enables a leader position at Grup Vall Companys. A committed workforce with a clear vocation for service that provides us with a distinguishing factor in order to undertake a constant growing for the group, along with strengthening it's leadership among the different business units" (Vall Companys 2016).

demonstrate their claims to expertise and therefore need less government participation.

Thirdly, Fuchs (2009) points to how they have also transformed themselves into their own "health authorities". Due to transparency issues, I can not make a definitive concluding remark on whether or not this has been the case, but as the groups only pharmaceutical company, Mevet seems to play a crucial role in the 'health' maintenance for all firms, across all three sectors. This is evident when we read: "MEVET was set up in 1992 principally to design and develop the necessary medicines for the VALL COMPANYS GROUP. This experience gained by MEVET is the distinguishing element that enables us to ensure a proper design of medicines" (Mevet 2016).

Lastly, again from a retail context, the core argument becomes a derivative of capitalist accumulation logic and claims that "public actors act too slowly and do not have the necessary expertise to set the most efficient standards" (Fuchs 2009). Yet, as mentioned above, in Vall's context this can be applied to the entire group, not only the retail firms. Mevet serves again as an example of single, autonomous actor which before would have been a responsibility of the state; and in some aspects it still is, but the state is there to set the regulations, not to put them into practice. In addition, this creates a great transparency barrier between the firm, the state, and society, since Vall's in many ways has gained the luxury of working behind closed doors.

3.3 Instrumental Power

With growing access to important decision-making bodies and influence over public sectors, Sell (2009) points to how instrumental power of global firms in the seed industry is reflected in the membership of policymaking committees, specifically in US trade institutions. These committees are key components to designing policies for multilateral, regional and bilateral trade agreements. Committees such as the USTR Agricultural Trade Advisory Committee represent a range of 19 corporations, including Monsanto, Burger King, Cargill, and McDonalds. With a broad reach, these organizations lack in promoting smallholder farmers interest. For example, Sell (2009) highlights how the U.S. and EU have been able to "exploit resource disparities and shift forums whenever it suits their interests" (Sell 2009: 192). This holds true for the horizontal shift from the World Intellectual Property Organization (WIPO) to the World Trade Organization (WTO) in 1986. The first time the U.S. brought intellectual property into the multilateral trade forum. Together with vertical shifting between multilateral, regional, and bilateral negotiations (Sell 2009). In the Spanish pork sector, we see this holds true also for the European Commission, and their ability to shift forums and policies. For example, the development of the Common Agricultural Policy (CAP) and further advances thereof, such as the creation of its two Pillar's.

Common Agricultural Policy (CAP):

Contextualizing this, one space in which instrumental power of Vall's is reflected is in the active participation of the European Union, and the active presence in being a key actor in Spain's receiving end of the CAP. The CAP serves to analyse the reach of EU agreements, on international, national, urban and rural agreements. Strongly embedded in its historical context, the six countries which signed the Treaty of Rome in 1957 "vowed that the hunger and starvation experienced in post-war Europe would not happen again" (European Commission 2016). Europe quickly suffered from an embarrassing result of massive food surpluses during the 1970's-1980's. Which gave rise to a massive shift in the 1992 reform (also known as MacSharry reform); the shift from product support (through prices) to producer support (through income support). With the objective of reducing food prices, this marks the beginning of European agricultural protectionism. By subsidizing, European farmers receive a 'fair standard of living' through a safety-net support, rather than through prices. For example, cereal prices were lowered by 35%, and beef prices by 15% so farmers were forced to accept grants and benefits in order to survive. (European Commission 2016).

Sceptics at Veterinarios sin Fronteras (2012), although confronted with governmental resistance, attained some (not all) figures of CAP subsidies

and observed that this policy has become corporate driven, and the biggest subsidies are heavily injected into the top "1%" (Veterinarios sin Fronteras 2012). After the publication of the 2010 CAP conference, the data demonstrated that most of the grants and subsidies were not going to small-scale farmers, but rather a handful of multimillion euro firms (Veterinarios sin Fronteras 2012). In fact, 16% of the beneficiaries receive 75% of all aid. This leaves 84% of the beneficiaries to share the resting 25% of aid. The average pay to beneficiaries is EUR 3,000. More so, half of the total beneficiaries have received aid less than and up to EUR 1.250. In its lowest standards, Veterinarios sin Fronteras discovered that small exploited families can receive only up to EUR 500 annually (Veterinarios sin Fronteras 2012).

Looking at the subsidies analysed and presented by Veterinarios sin Fronteras, Vall's received EUR 266,842.00. Interestingly enough, Patel (Vall's largest processor) received an even larger amount of EUR 826,055.66. In total, Vall Companys Group's' pork sector, received EUR 1.092,897 (Veterinarios sin Fronteras 2012). This might not be much compared to other beneficiaries such as Zumavesa, who received EUR 10,348,401.98, but we must remember that these companies add up to be 16% of all beneficiaries in Spain. How and why do two firms receive almost EUR 11.5 million? Yet when comparing it to a smallholder farmer (84% of total beneficiaries), which receive between (and possibly less than) EUR 500-1,250 in the same time period, the difference is existential, especially in terms of survival. This amount of leverage creates disparities at both national, and international levels. It must be recognized that it is only a handful of families and individuals which receive the majority of the aid in Spain from the CAP, leaving millions to struggle to produce more yield for the same income, fighting to maintain the pace so the treadmill does not spit them out.

Questions rise when the the firms which control most of the market receive the biggest grants, especially in concern to public money. Veterinarios sin Fronteras ask: "Why do agribusiness firms, with multimillion euro sales, receive assistance? Why do they flood the aristocracy with millions of euros of public money?" (Veterinarios sin Fronteras 2012). Levels of concentration and hard agreements with one of Europe's strongest sector, indicates that what one day was the worrying need to feed the population, has now become an oligopolistic, corporate drive space reserved for the powerful few. Therefore, making competitiveness extremely competitive. As of 2014-2015, the top four Spanish pork firms (Vall Companys, El Pozo Alimentacion, Jorge S.L. and Frigorificos Costa Brava) control 57% of the market. This reflects the drastic vertical integration processes since the 1970'-80's, and how Vall Companys acquired to own the entire supply chain of pork, poultry and beef production, whilst maintaining and developing a rupturing status in all three sectors.

Currently, the CAP aims to "answer to the need for a decent standard of living for 22 million farmers, agricultural workers, and a stable varied and safe food supply for its 500 million citizens" (European Commission 2016; CAP). In the September 2016 CAP publication a clear division is made in its central objectives, distinguishing the so-called First Pillar of 'direct payments', and the Second Pillar of 'rural development'. The fixed budget for 2014-2020 provides a total of EUR 408.31 billion, EUR 308.73 billion for direct payments and EUR 99.58 billion for rural development. This, according to the European Commission is also done to "alleviate the impact of the Russian embargo on certain agricultural products and of the difficult situation in the dairy and pigmeat sector" (European Council 2016).

Apart from claiming to making direct payments 'fairer' and 'greener', the CAP places significant priority for Spain's rural development, "fostering the competitiveness of agriculture; ensuring the sustainable management of natural resources and climate action; and achieving a balanced territorial development of rural economies" (European Commission 2016; CAP). Consider the following image and the emphasis placed on tourism:

Image 4.2: Second Pillar; Rural Development in one image



Source: European Commission 2016; CAP

This is created by the coming together of different actors negotiating for trade agreements in small political spaces. In the development of the CAP, it is not only farmers that gather, but also politicians, economists, agribusinesses, analysts, scientists, pharmaceutical companies etc. With this concentrated space of negotiations and agreements, leads me to wonder about the bias carried by policy and decision makers.

Regulatory Capture

Another aspect to instrumental power worth analysing within the Spanish agrifood system and Vall's pork context, is the concept of the 'regulatory capture' analysed by Dal Bó (2006) in 'Regulatory Capture: A Review'. From a public utility lens, Dal Bó points that a natural monopoly consists of one firm, and "regulation is needed to prevent that firm from exploiting market power" (Dal Bó 2006: 204). This motivation to protect the consumer is also known as 'public interest'. However, observers of regulatory procedures quickly challenged this perspective. Enhanced furtherly by Stigler (1971), regulation ends up being "'captured' by the firms it is supposed to discipline" (Dal Bó 2007: 204).

From this premise, regulation becomes captured in two ways in Vall's context: first, the firm picks up part of the regulators' role of 'public interest'. I showed this above through discourse constructions, where discourse demonstrates an inclination towards firms replacing the traditional authorities. This shows a clear link when Fuchs points that food retailers represent themselves as the "guardians of consumer interest..." (Fuchs 2009: 38 and Burch and Lawrence 2005), particularly in the context of food 'quality' and 'safety'. And second, the concept, 'revolving door' in Dal Bó (2006) 'Regulatory Capture: A Review", introduces a lens through which to identify a sense of bias in decision making. Often, regulators come from industry backgrounds, creating a tendency to favour pro-industry policies (Dal Bó 2006). In broad terms, regulation includes all forms of state intervention in the economy, and in narrow terms, the control of natural monopolies (Dal Bó 2006). Therefore, I will consider the Spanish Ministry of Agriculture, Food and Environment as a focus point, and will observe whether current high stake positions within the ministry are individuals with industry, business and/or economic background, pointing to a possible tendency to favour pro-industry decisions. I do not attempt to accuse anyone or place words or opinions into anyone's mouth, but rather observe public information given on the Minisitry of Environment, Food and Environment website: lhttp://www.magrama.gob.es/en/ministerio/funciones-estructura/organizacionorganismos/organigrama/. Therefore, names are not necessary, since it is public knowledge, and I do not argue there is a clear correlation between background and decision making, but I hope this can raise further critical approaches to the Spanish food system debate.

The Spanish Ministry of Agriculture, Food and Environment, presents an organizational chart, in which 79 employment positions are required to form the ministry. Positions are divided in eight subgroups, including the Minister, Secretary of State of Environment, General Secretary of Agriculture and Food, Director Cabinet for the Minister, General Director and Deputy General Director, Autonomous Organisms, and State Companies. Minister's are appointed by ruling political party. Therefore, the current

minister was appointed by the Popular Party, a neo-liberal party which supports the industrialization of food, and favours profit driven, highly consolidated agribusiness environments. For the sake of this paper, I will select the following current positions to apply to the 'revolving door' concept: Minister, Secretary of State of Environment, and General Secretary of Agriculture and Food. These are the most relevant to the pork context. For example, under the General Secretary of Agriculture and Food, lies directive positions such as Rural Development and Political Forestry's, and Food Industry. I will look at the professional background of the current employee from 2000-2014, although for some there is less information available.

First, the latest Minister of Agriculture, Food and Environment (since now new government is being formed) has a background which, through the 'revolving door' concept, indicates a possible tendency to favour proindustrial and economic policies. In 2000, the minister was Executive Advisor to the Ministry of Agriculture, Fisheries and Food from April-June. That same June, 2000, she was announced General Secretary of Agriculture until 2003. April 2003 witnessed an increase in responsibility, and became General Secretary of Agriculture and Food until 2004. From 2004-2012, the minister took a more corporate role, and worked as a Director of Strategic Planning at FERTIBERIA S.A., a fertilizing company in Spain, as well as Advisee to FERTIAL S.P.A., an Algerian commercial fertilizer manufacturing company. From 2012-2014, regained General Secretary of Agriculture and Food and in April 2014 was officially announced Minister of Agriculture, Food and Environment (Ministry of Agriculture, Food and Environment (Ministry of Agriculture, Food and Environment 2016).

Second, the Secretary of State of Environment, involved in the public sector, in 2002 was appointed to the Senior Civil Administrators of the State. Later, from 2004-2007, became Assistant Deputy Director at the School of Selection and Training of the Public Administration Institute. In 2007, was appointed Advisor to the Secretary of State for Regional Cooperation in the Ministry of Public Administration until 2008. After that, from 2008-2011 became Deputy Director of Bilateral Relations with the Autonomous Communities in the Ministry of Territorial Policy and Public Administration. In 2012 was selected General Director of Sustainability of the Coast and Sea to later become Secretary of State of Environment.

Third, the General Secretary of Agriculture and Food was initially, from 2002-2007, was the Advisor of Agriculture, Fisheries and Food at the Permanent Representation of Spain to the European Union. In 2007, became a technical advisor of the sub-secretary of the Ministry of Agriculture, Fisheries and Food until 2008, when he became Deputy Director of Agreements and Regional Fishery Organisations until 2010. In 2010, then became Deputy Director of Marine Resources and Aquaculture, until 2012. Then, until 2014 was Director of Production and Agriculture, until announced General Secretary of Agriculture and Food.

Not only are the inclinations towards industrial production represented in the political party which appointed the minister, but also their previous work experience and the work experience of those responsible of answering to the Minister, yet are still in charge of decision-making. From the indication of the professional background, it is feasible to deduce that, for example, the minister has been "socialized' in an industry environment" (Dal Bó 2006: 214) and is therefore more inclined towards supporting and developing policies and, industrial, biotechnological production schemes.

Chapter 4: What does this all mean?

The expansion in industrial pork production in Spain marks a new beginning of a new exporting industrial pork industry which functions under classical neo-liberal arguments of employment, production, profit, development, legitimacy, food security and food safety. More so, have gained an understanding to what extent this is also part of a higher 'globalization project' (McMichael 2005). In this context I will argue that the increase in pork production forms part of the corporate food regime presented by McMichael. Through Sell's (2009) three forms of power, we see how agribusiness firms such as Vall Companys are increasingly capable of influencing the rules by which they themselves must play (Clapp 2009).

For the sake of this paper, I rely on 'Analysing State-Society Relations in Spain; with a focus on the pork industry' (Fernandez 2016) which seeks to understand state-society relations in the context of recent and rapid increase in pork production in Spain. From a Marxist class-based approach a visualization of society through class differentiations demonstrates how within classes, alliances are born, creating clashes between classes, which lead to forms of domination. This problematizes Fox's (1993) contradiction between capital accumulation and political legitimacy by claiming that modern institutional and private economics does not create a modern contradiction of the state, but rather a relationship, since capital accumulation has become a form of political legitimacy. Findings indicate that in Vall's context, one can not examine state-society relations on the basis of Fox's contradiction of political legitimacy and capital accumulation, because Vall's has increasingly been playing both roles of societal and state actors. As seen through Chapter 3: Discursive power in adopting the role of protector of the consumer, 'health authorities', and the 'expertise role' (Fuchs 2009).

Taking Poulantzas (1978) perspective that state is not a static entity, or a thing in itself that can act for and by itself. Rather, the state is a compilation of forces, balances and capabilities amongst classes through the practice of agency which allow the state to function. Sell's (2009) forms of power assist to gain an understanding of the increase in corporate capability to influence the playing field, and at the same time changing the role of the state. Loosing the role of the protector of the consumer is one way in which the state is changing roles. More so, Lang and Heasman (2015) discuss how food policy is a social process, which consists of policies and policy-makers, "the combination shapes the overall dynamics of the food system" (Lang and Heasman 2015: 18). Therefore, it is necessary to "look at food as the outcome of a system of relationships between sectors and interests" (Lang and Heasman 2015: 19).

With this premise, the Spanish state has adopted a 'baby-sitting' role which forms part of the globalization of agribusiness governance. This is significant because my findings confirm that "relationships between industrial meat regimes, food security politics and the global land rush" are relationships that have not been sufficiently considered in research or in policy (Schneider 2014). This leads to my main research question:

 What role do leading pork agribusinesses in Spain play in policymaking, governance, and regulation of the pork industry?

My findings, through Sell's (2009) three forms of power, demonstrate that Vall Companys Group exercises structural, discursive, and instrumental power in order to maintain a dominant status in Spain's food system. As one of the countries most profiting pork producing company's, Vall's holds a significant position in the Spanish food system. One place where this is symbolized, is in the high-stake presence they have in top-bottom agreements such as CAP.

An analysis of Vall's position in the industry, structural power illustrates how a hierarchical structure, sets forth a highly consolidated, vertically and horizontally integrated production system. More so, the impact of such structures is that it is given much political and economic importance. My research clearly indicates that 57% of the Spanish pork market is in fact controlled by four firms, confirms a low competitive environment controlled by only a few large firms in the Spanish pork industry. Additionally, Map 1 displays the level of geographic concentration, which is highly significant for transportation purposes. With this, I hope to contribute to Sell's (2009) two key factors which drive consolidation, and propose geographic concentration, or strategic geographic alliances, as an additional factor. Due to its economic significance, this structure becomes a great corporate force, pressuring the government

and its regulatory procedures, creating a vacuum between state and firm. This vacuum, as we saw, allows for regulatory captures, as well as the opportunity for firms to become the "guardians of the consumer" (Fuchs 2009: 38 and Burch and Lawrence 2005), adopt an 'expertise', as well as 'health' authorities.

Vall's exercise of discursive power demonstrates a clear depiction of which side of table Vall Companys sits at in todays 'food wars' (Lang and Heasman 2015 and Sell 2009). Phrases seen above such as: "...proper design of medicines with total guarantees of QUALITY, SAFETY and EFFICACY both in national and international markets" (Mevet 2016) illustrate a life-science discourse. In the understanding that quality and safety might have different meanings in different contexts, discourse also forms part of the food wars, used as a 'weapon' to couch certain preferences (Sell 2009). Consequentially, in the website context, triggering public opinion. From a retailer perspective, Fuchs (2009) claims that retailers represent themselves as "guardians of consumer interest..." (Fuchs 2009: 38 and Burch and Lawrence 2005). Yet, in Vall's context, this goes beyond the retail niche, and becomes a business ethic for the entire group. Also, Dixon (2007) observes that retailers are replacing traditional authorities, "promot[ing] their own authority based on charisma and claims to expertise..." (Fuchs 2009: 38). An intersection of Structural power and discourse constructions illustrates how Vall's, again as an entire group (not only retailers), have also adopted the 'expertise' role. The development of MEVET as their only pharmaceutical provider shows how involved the biotech community is. This leads me to also conclude that Vall's has transformed themselves into their own "health authorities" (Fuchs 2009).

Instrumental power, is reflected in Vall's presence as a key player in a top pork producing country of the European Union, and the active presence in being a key actor in Spain's receiving end of the CAP. With the 1992 'MacSharry reform', the shift from product support (through prices) to producer support (through income support) marks a new system of safety-nets, which from a critical perspective, clearly favours the proletariat "1%", private agribusiness firms over small scale farmers. Veterinarios sin Fronteras (2012) in their critical analysis strongly illustrate the inequality within CAP's beneficiaries. Policies should therefore be analysed not only through and by their activities, for example implementing bike paths for tourists, but also through its objectives, which lead to intended as well as unintended outcomes. This problematizes the CAP's two Pillars. More so, the adoption of the two pillars shows how European agriculture has become part of the 'globalization project', with strong emphasis on development, pushing for a European agriculture, which pushes for a world agriculture. Forcing the local to serve the global.

One way to understand what this means, is to analyze from a political ecology perspective, critically engaging with growing corporate activity and asking:

What are the implications of growing corporate activity in the food system?

Corporate concentration and market domination lead to several negative outcomes, and as Howard (2016) explains, these impacts are seen on communities, labour, human health, animal welfare, the environment and also has market consequences. In economist terminology, these are 'externalities'. Market consequences includes consumers paying higher prices, suppliers receiving lower prices, and reduced innovation. We have witness suppliers receiving lower prices after the 1992 CAP reform, when prices dropped dramatically to reinforce the shift from product support to producer support. In addition, when a few firms control the market and want to raise consumer prices, "they can simply indicate their intention...a strategy that is called *price signalling*" (Howard 2016: 5). Oligopolistic environments can quickly enter price wars, yet the result of price signalling is an 'unwritten rule' which states that competing on price is unacceptable, and is considered to be "non-strategic" (Howard 2016). Therefore, firms will informally agree to compete based on advertising, product differentiations and reducing labour costs. For example, Spain experienced Europe's lowest production costs (1.64 euro/kg), in part due to lower building and labour costs (ADHB 2015).

Furthermore, the more that an industry, or in this context a firm, is consolidated, fewer people have the power to make decisions. Especially in concern to what is produced, how it is produced, and who has access to the product (Heffernan, William, D., Hendrickson, M., and Gronski, R. 1999). Howard (2016) states that dominant firms are controlled by a board of eleven people on average, with a concentrated power in the hands of the chief executive officer. However, in Vall's context, we have seen that decisions are made by three siblings, and one external partner. The power is divided in half, meaning that the three Vall siblings control 50%, and the one external partner control the remaining 50% (Lamelas 2015).

To dive into this question deeper, Fuchs, Kalfagianni, and Arentsen (2009) present the impacts of retail domination on society and the environment. The notion of food quality adapts a new definition when used in a food wars context. One describing an appearance, cleanliness and taste. Similarly, food safety indicates yield, pointing to levels of pesticide and microbial presence in food (Fuchs 2009). In Vall's pork production context, how pork is produced, meaning, the un-holistic, or holistic animal welfare and ecological balances, forms part of other "quality attributes by some consumers and buyers in the food chain" (Fuchs 2009: 41

and Northen 2001). The results of current production and distribution processes is a produce which may look better, but does not necessarily taste better, or in some cases are "nutritionally weak" (Robison 1984: 289). Through social dimensions, sustainability, in the context of food governance influences workers' rights, migration, rural livelihoods, gender issues, and food security. In the context of Vall's, we have seen how Spain has experienced some of the lowest labour costs, and at the same time some of the highest prices (ADHB 2015). More so, these social dimensions are what constitutes and indicates the "goodness' of production, placing more emphasis on process standards than product standards" (Fuchs 2009: 43 and Konefal, Mascarenhas, and Hatanaka 2005).

Chapter 5: Conclusions

In conclusion, Vall Companys forms part of a much greater economic project than ever before, especially in agricultural terms. Social and political dimensions to agriculture illustrate the modern relationship between humans, food and markets. At broader levels, as seen through global corporate regimes, which sate that a "set of power relations where formal rules and operating procedures are subject to continual contention..." (McMichael 2000: 22). Agriculture at global, as well as at local scale has been the most resistant to capitalist logic, yet, at the same time, such is the case with Vall's in Spain, we see a concentrated agricultural niche which in fact forms to be a crucial industrious sector, serving mainstream national economic figures of employment, production, profit, development, legitimacy, food security, food safety and quality.

From debates surrounding the three food regimes, McMichael's (2000) concept of a global corporate food regime, in which he highlights two "operating principles" (McMichael 2000: 23), in global food governance demonstrates how, in hierarchical terms, the local serve the global. First, globalization has become a higher-order of the development project, also known as the 'globalization project' (McMichael 2005). Meaning, that development has seen a shift from a nationally centred and organized industrial growth to a globally managed growth; this also includes the shift from industrial to post-industrial technologies. This invites me to arrive at two of my most critical findings. Vall's does not only fall under the globalization project, but primarily under the Spanish national development project, followed by the European project. In other words, Vall's is valued as a crucial, capital accumulative firm serving the Spanish economy. Yet, in a globalizing world economy, the Spanish economy in turn

serves the European economy, which serves the global economy. It is clear through agreements such as the CAP that agriculture is more than ever market oriented and acts as a European agriculture in the ever more world agriculture.

Second, McMichael (2005) observes the world is experiencing a shift in political governance. This is not to say that states are disappearing, but rather adapting to a different role. In particular, this shift is constituted by the changes in market governance. Markets have seen a transition from being state constructed to being constructed by "state/multilateral institutions" (McMichael 2000: 23). In answering my fourth research question: to what extent does corporate power in Spain's food system, with particular focus on Vall Company's Group, limit government regulatory powers? The transition from state constructed to state/multilateral institutions, signifies a powerful intrusion of agribusiness firms which limit government regulatory procedures through, for example, 'regulatory captures', as well as adapting the role of health and expertise. This pushes away the need for government presence in the industry, diminishing their ability to 'govern' the firms, or collect data about their production. Inevitably, governing bodies need representatives of the firms in order to develop consolidated pro-industry policies. This is one of the spaces where alliance-building is born.

Shift in political governance opens a vacuum for further implications on social, political and environmental dimensions of society, adding an extremely complex dynamic to food politics. Through Fuchs (2009) I discovered that in Vall's context, power does not only lie in the retail sector, and key roles which replace traditional authorities allow Vall's to adopt these authorities (health and expertise) as a business ethic for the entire Company 'Group'. This was evident in Chapter 3: Discursive power. Howard (2016) offers an understanding of the implications of highly consolidated, low competitive environments. For example, market consequences are seen both in suppliers receiving lower prices in the CAP's shift from product support to producer support and lower labour costs; "Spain also experienced one of Europe's lowest production costs (1.64 euro/kg), in part due to lower building and labour costs" (ADHB 2015).

Drawing from data from Richard brown in 2012 and looking at my data in 2014-2015, expansion is evidently a priority on the agenda. With the latest COP21 declaration that an increase in food production is necessary in order to feed growing global populations, I predict that the expansion and consolidation will continue. Firms such as Vall's Companys Group have the infrastructure, and the internal capacity to continue expanding. Global pressures on biotechnical advances continues the advancements of certain agricultural treadmills, which if viewed from neo-liberal perspective, as tends to be the case, fosters further consolidation procedures.

From prior research, Spain is under researched in the agribusiness governance literature. Meanwhile, expansion and consolidation continues to increase. I hope this research paper serves as a tip of the iceberg, from this there is a lot more that can come to the surface.

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List of Appendices

Table 4: Vall's Discursive Paradigms

Vall's Discursive	Characteristics	Connection to Vall's website	
Paradigms		(information directly from www.vallcompa-nys.es , based on 2015, unless indicated)	
Productionist	 Increase pork supply large production scales a. Profit-led b. Number of herds c. Pork production in '000 t cwe d. Slaughtering's e. Mass distribution 2. Health and well-being 	1. Production scale a. Profit-led: Turnover 1,408 Millions b. Number of herds: Pork Production: C. Pork production: d. Slaughterings: "an annual volume of 1,200,000 pigs" (http://www.patel.es/resources/PDE1-Politica-Oct-2015.pdf) e. Distribution: "Storage and transport of food products is an activity that requires great responsibility and can have a negative impact on the final quality of products" 1. By making reference to the technological advances, Vall Companys claims "we are able to guarantee total traceability in all processes, as well as high levels of food safety and constant optimal quality of the product" (VALL COMPANYS GROUP: MAXIMUM	
		sources/PDE1-Politica-Oct- 2015.pdf) e. Distribution: "Storage and transport of food products is an activity that requires great responsibility and can have a negative impact on the final quality of products" 1. By making reference to the technological advances, Vall Companys claims "we are able to guarantee total traceability in all processes, as well as high levels of food safety and constant optimal quality of the product" (VALL COMPANYS	

Life-Sciences	1. Increase	pork supply		
<u>Integrated</u>		roduction		As an overarching objective of
	scales		increasing food supply, this re-	
<u>Paradigm</u>		ber of herds		mains the same as in box 1
		production		(production scale).
		00 t cwe		
	-	htering's distribu-		
	u. Mass	distribu-		
		nd well-be-		Health and safety have a gravi-
	ing		tational significance in this par-	
			adigm	
	3. Acts as a	remedy to		"the introduction of latest-gen-
	a numbe	er of limita-		eration information systems in
		ntified in		all mechanical areas, which link
		uctionist		and automate the group's vari-
	paradigr			ous production plants.
		s food as a		Thanks to all this, we are able
	arug healt	for good h		to guarantee total traceability in all processes, as well as high
	neare			levels of food safety and con-
				stant optimal quality of the
				product"
<u>Life-Science methods</u>	1. Genetic I	Modifica- 1	1.	Genetic Modification: "As part
	tion (GM	-		of its integrated production
	2. Nutriger			process, all the feed for live-
	3. Nanoted	• .		stock in Vall Companys is pro-
	4. Substitu	tionism		duced by companies in the
				Group, with feeds specially designed to meet the needs of the
				animals and to ensure the high-
				est quality in all stages of the
				rearing process. Therefore, Vall
				Companys Group's feed is one
				of the mainstays of its meat
				production, and represents a
				guarantee of quality in the final
				product for the consumer."
			a	
				Nutrigenomics: I have been confronted with research and
				time constraints: not applicable
		la	3.	Nanotechnology:
			а	- "- ' ' ' ' '
				state-of-the-art technology,
				Patel's facilities are designed
				to carry out the various
				stages of the production
				process, from slaughter to packaging and freezing,
				quickly and using latest-gen-
				eration equipment in line
				with the strictest standards.
				A skilled workforce and the

- implementation of the best technologies for pork production enable the quartering process, from the time the animal leaves the stabilisation room to packaging, to be completed in less than 30 minutes. Together with the ISO-specified quality controls that are performed continuously at the different process points, this guarantees a high-quality meat that retains all of its natural qualities."
- b. Packaging: "Patel operates different packaging lines designed to meet the specific needs of each customer. A high level of process flexibility and adaptability provides for optimal responsiveness, with maximum sanitary guarantees and implementing at all times the same quality standards consistently in all products over time."
- c. Services: "Patel's commitment to constant improvement in the quality of its products means a highly reliable personalised service.
 Patel's quality is further backed by the unfailing dedication of its human team and the Vall Companys
 Group's policy to plough back earnings into the business." (http://www.patel.es/en/procesos.html)
- d. Firms: Patel, Frivall, CincoVillas
- Pharmaceuticals: Mevet
 "MEVET is the distinguishing element that enables us to ensure a proper design of medicines with total guarantees of QUALITY, SAFETY and EFFICACY both in national and international market"
 (http://www.mevet.es/en/company/)
- 5. Substitionism: on an ecological, holistic level, it could be argued that feed/grain is a substitute for hay/grass. However, due to

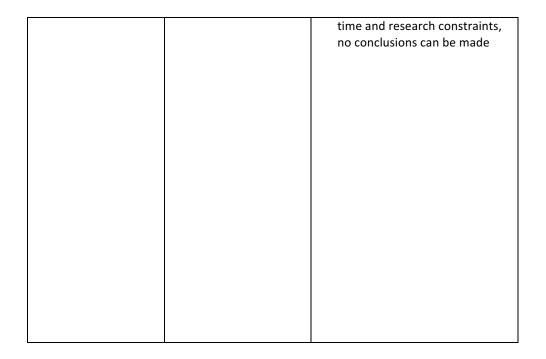
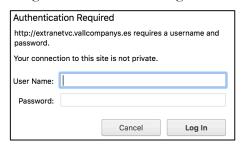
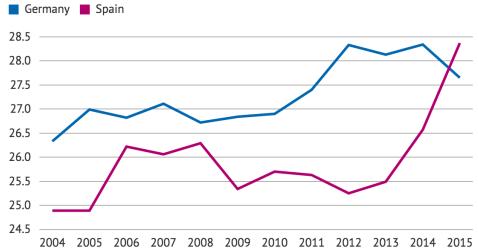


Image 4.1: Result of clicking the 'Traceability' link



Source: http://extranetvc.vallcompanys.es/

Figure 3.5: Pig numbers in the EU's largest pig countries, Spain and Germany for 2014 and 2015



Source: http://www.pigprogress.net/Finishers/Articles/2016/4/Spanish-pig-industry-reaching-record-sizes-2784529W/

The top 5 PK countries : Concentration within **national boundaries** (especially NW Europe) and selective cross-border M&A □ Concentration, continues □ Selective cross-border M&A Danish Crown falls to 80% DK PK, growth De & UK Dutch VION entry in DE has accelerated change .. □ Tönnies grows much faster □ VION falls to 52% of NL PK GNP, facing domestic & live export competition. UK M&A FR consolidation & tensions Production by operator in the top 5 production countries ('000 t cwe) – 2010 \$ 5,000 4,500 4,000 3,500 3,500 2,500 2,000 1,500 1,000 500 9

Figure 3.7: The top 5 pork countries in Europe: Concentration within national boundaries

Source: http://ec.europa.eu/dgs/health_food-safety/information_sources/docs/ahw/pres_24102012_opening_4_richard_brown_en.pdf