

CO-OPERATIVE COMPETITION: A FOUCAULDIAN PERSPECTIVE¹

I.

This paper considers the extent to which Michel Foucault's conception of power gives a useful explanation of power relations between firms. It examines the perceived shift in the nature of interfirm relations from the traditional model in which firms operate as autonomous units within a competitive industry, to the co-operative competition model whereby firms engage in co-operation at certain levels of their operations and compete at other levels. It argues that the concepts of power and competition are closely intertwined and that an understanding of how power operates can give a greater understanding of the nature of competition within an industry. However the issue of power relations in the presence of co-operative competition has not been adequately explored by the literature. An analysis of the type of power reflected in interfirm relations is held as being the key to understanding the simultaneous existence of co-operation and competition between firms.

II.

This paper rests on the hypothesis that different types of competition are synonymous with different types of power. In neoclassical theory and in transaction cost theory, imperfect competition is portrayed as being synonymous with a definition of power as the capacity to dominate. We argue that this type of power cannot be synonymous with certain types of co-operative competition.

In neoclassical theory, firms are depicted as isolated, autonomous entities. The existence of market power is seen as synonymous with the existence of imperfect competition. In imperfectly competitive markets, power lies with an individual firm (or group of firms). This type of power coincides with the traditional political philosophy view of power as the capacity to dominate. A dominant firm has characteristics or attributes which allow it to coerce other firms to act against their interests in ways which benefit the dominant firm. Market power can be easily identified through firm size, market share or growth rates.

Transaction cost theory also considers firms as autonomous. Even where production processes are complex and contain many different stages, co-operation is not an

efficient solution. Rather, firms must integrate vertically to avoid inefficiencies. If they do not, they incur transactions costs (Williamson 1975). As in the neoclassical theory of the firm, transaction cost theory implies a definition of power as the capacity to dominate. Williamson has shown a reluctance to analyse power directly seeing power as a tautological concept. He argues that power analysis is typically 'an exercise in *expost rationalisation*: power is ascribed to that party which, after the fact, appears to enjoy the advantage' (1995, 33). The concept has no ability to predict which firms are likely to gain the attributes allowing them to dominate. Williamson argues that power 'will not shed its tautological reputation until a unit of analysis has been named and dimensionalized' (1995, 34). He requires that a power analysis take the form of a formalised model and come up with empirically testable predictions. This coincides with the desire of the Critical Theory school associated with Lukes² and Habermas who also take a positivistic approach to the analysis of power. Throughout this (1995) paper Williamson speaks of power only in terms of dominance and as something which stands in opposition to efficiency.

Williamson's work on hierarchies within firms has been extended by Hamilton and Feenstra (1995), to account for interfirm co-operation. Williamson argues that, within firms, power comes from the top down. Again, this reflects a 'power as capacity to dominate' definition. Hamilton and Feenstra argue that the concept of hierarchy can be used to describe power relations across firms. They take Williamson's hierarchy concept from a Weberian slant and come up with the following definition of 'economic organisation':

To the extent that a network of people or firms are linked together by the exercise of binding norms, then that network functions as an economic organisation. To the extent that networks of people or firms are linked together only by their individual economic interests, then that network does not constitute an organisation in its own right. The key point in this definition is the participant's subjective recognition that they are bound to the authoritative norms of the organisation, that they are not formally free to act in other ways and that there is a coercive means to enforce the normative rules (1995, 63).

Does the type of economic organisation described by Hamilton and Feenstra reflect a different type of power relation between firms than that reflected in neo-classical and transaction cost models? They outline two types of network - the vertically controlled network and the horizontally controlled network. The vertically controlled network reflects power in terms of capacity to dominate. A powerful family or firm decide on and enforce the rules of the network. In this way, the family control the behaviour of other institutions (subcontractors, trade unions, and so on) within the network. There is co-operation, but it is enforced co-operation.

The horizontally controlled network is composed of 'conceptually equivalent units' (1995, 69). These units are dominated by 'organisational rules' (1995, 69) which are derived from a number of possible sources, for example, 'ritual decorum, ethnic pride or bureaucratic professionalism' (1995, 69). These rules would prevent the development of monopolies, vertical and horizontal integration within the network. They therefore determine or control the behaviour of firms within the network. However, Hamilton and Feenstra do not discuss who is responsible for establishing and maintaining these norms of behaviour. Their definition of economic organisation implies that there is some form of consent involved among participants in the network; that they have consented to be bound by the norms laid down by the network.

The idea of power as involving the consent of those who are governed is the 'second major conception of power in modern Western thought' (Hindess 1996, 10). In this definition, some individual is given power legitimately in order that they might pursue the collective goal. However, Hamilton and Feenstra also say that there is 'a coercive means to enforce the normative rules' (1995, 63). This suggests that participants in the network are bound by the established norms out of fear. If this is the case, there must be some institution which has the capacity to rule the network. The mention of coercion suggests that this institution may not have the consent of participants in the network but rather controls their behaviour through repression. If this interpretation is correct, Hamilton and Feenstra's description of power among firms is no different from Williamson's description of power within firms. Power is still (largely implicitly) defined as the capacity to dominate and, as such, it precludes non-coercive co-operation between firms.

Hamilton and Feenstra's research suggests that there can be a type of competition which involves co-operation but which operates on a 'power as capacity to dominate' basis. This may be more correctly termed 'co-opted competition'. Other researchers have highlighted the existence of co-operative competition which does not reflect any coercion and is therefore truly co-operative. In this paper, it is the latter definition we imply when we use the term co-operative competition. We argue that Michel Foucault's conception of power gives a framework with which to analyse co-operative competition. The next section gives a brief outline of Foucault's framework.

III.

It is difficult to pin down Foucault's conception of power. It is not confined to a single text and his views change between his earlier and his later writings. There does seem to be a general consensus as to what Foucault's writings on power are not, however. 'There is in Foucault's writings no theory of power, not even a sketch of such a theory' (Cousins and Hussain 1984, 225; see also, for example, Dreyfus and Rabinow 1982, 184; Hoy 1986, 129). Foucault provides instead a 'tool-kit for the analysis of power relations' (Cousins and Hussain 1984, 225). He is concerned with the techniques as opposed to the nature of power. He provides an alternative conception of power to the traditional notions of power as capacity and/or with consent. Foucault's argument starts with the Nietzschean view that power can be both positive and negative. It is not always synonymous with repression as it is presented in Marxian and feminist analyses, for example. Foucault admits that in his earlier work, *Madness and Civilisation,* he did use power in its repressive form, 'but it seems to me now that the notion of repression is quite inadequate for capturing what is precisely the productive aspect of power' (1984, 60).

Critical theorists such as Lukes and Habermas see power as the antithesis of freedom, with freedom being brought about by scientific knowledge which provides an escape from ideology. Foucault, on the other hand, argues that knowledge cannot be 'emancipated from power relations' (Hoy 1986, 133). The two are always bound together in 'power-knowledge':

there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations (Foucault, 1984, 175).

This immediately introduces an analytical problem. How can power operate if individuals are free to behave as they will? Foucault gets around this problem by arguing that previous analyses of power have defined freedom wrongly. Their definition of freedom is abstract: 'from his claim that a society without power relations would be an abstraction, it follows that freedom in the absence of power would be equally abstract' (Hoy 1986, 139). For Foucault, there is no such thing as knowledge that is free from ideology, so knowledge can never provide freedom.

Hindess provides a succinct description of Foucault's argument: 'power is exercised over those who are in a position to choose, and it aims to influence what their choices will be' (1996, 100). For Foucault, power determines individuals' behaviour not by coercion but rather by controlling individuals' decisions to behave. It is found in all parts of all societies. In Discipline and Power, he identifies in the seventeenth and eighteenth centuries the development of 'a new "economy" of power, that is to say, procedures which allowed the effects of power to circulate in a manner at once continuous, uninterrupted, adapted, and "individualised" throughout the entire social body' (1984, 61). Foucault's framework represents a 'shift from global to local forms of power' (Cousins and Hussain 1984, 239). For him, the state is 'far from being able to occupy the whole field of actual power relations' (1984, 64). Power operates in micro-powers at the local level of societies. It does not come from the top down as in the traditional definitions of power. But if power is omni-present then it must take different forms in different types of relations. This generates another problem. Is Foucault's analysis of power too general to say anything useful? According to Hoy, Foucault avoids this problem by appealing to the nominalist nature of the term power. He also argues that that there is no one theory of power: 'Foucault considers power-knowledge in social relations, but without saying that this is the only possible description' (Hoy 1986, 137).

How might a Foucauldian analysis be carried out? In his earlier work, *The Order of Things* (1966), Foucault introduced a method he called archaeology. This is the 'analysis of systems of knowledge' (Davidson 1986, 221). In archaeology, Foucault

wants to look at the systems for producing 'truth' within the human and social sciences. He considers the societal structures, or epistemes, that make ideology possible. Initially, Foucault explores the idea of knowledge as a concept without any specific consideration of the systems within which power and knowledge might interact. He provides an analysis of power 'without a corresponding conception of system, without a developed notion of a social structural framework' (Honneth 1991, 150). The result of archaeology, for Honneth, is 'arbitrariness in the notion of power' (1991, 150).

In his later work, Foucault adopts and develops the Nietzschean concept of genealogy. He defines genealogy in the following way:

genealogy, that is, a form of history which can account for the constitution of knowledges, discourses, domains of objects, etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness throughout the course of history (1984, 59).

This involves analysis of the 'modalities of power' (Davidson 1986, 221). Foucault attempts to analyse the 'microphysics of power' (1984, 175). In genealogy, Foucault sees the social sciences as acting in the form of disciplines. The disciplines are central to the concept of power-knowledge. 'Discipline' is a play on words as it suggests control and in turn power, but it also means the process of learning and therefore suggests knowledge. Foucault defines discipline as 'a type of power, a modality for its exercise, combining a whole set of instruments, techniques, procedures, levels of applications, targets' (1984, 206). It 'increases the forces of the body (in economic terms of utility) and diminishes these same forces (in political terms of obedience)' (1984, 182). But this power does not act by coercion or consent as it does in the traditional definitions:

It is a power exercised over one or more individuals in order to provide them with particular skills and attributes, to develop their capacity for self-control, to promote their ability to act in concert, to render them amenable to instruction, or to mould their characters in other ways (Hindess 1996, 113).

How exactly is this power exercised? In Foucauldian analysis, power is exercised within a network of social interaction as distinct from being located with a particular individual or institution. The network is developed at the instigation of a number of minor processes. These minor processes have a number of possible identities: `an industrial innovation, a renewed outbreak of certain epidemic diseases, the invention of the rifle, or the victories of Prussia' (1984, 182-3). Foucault summarises these processes as 'small acts of cunning endowed with a great power of diffusion' (1984, 183). These processes generate the need for knowledge which is gathered and put into action in three stages: 'hierarchical observation, normalising judgement, and their combination in a procedure that is specific to it - the examination' (1984, 188). Foucault uses the 'military camp' to demonstrate: 'in the perfect camp, all power would be exercised through exact observation; each gaze would form part of the overall functioning of power' (1984, 189). It is this constant surveillance which controls individuals by controlling their choices of particular action. The perfect disciplinary apparatus would make it possible for a single gaze to see everything constantly' (1984, 182). Foucault invokes Bentham's 'panopticon,' a design for a prison whereby all prisoners could be observed at all times from a single location³. 'It is the fact of being constantly seen, of being able always to be seen, that maintains the disciplined individual in his subjection' (1984, 199).

Foucault views the impact of changes in production processes on the organisation of factories in the late eighteenth century as reflecting this type of technique of power: 'it was a question of distributing individuals in a space in which one might isolate them and map them; but also of articulating this distribution on a production machinery that had its own requirements' (1984, 144). The need for control of the workforce and the economic benefits of the division of labour into single-purpose tasks led to organisation founded upon mass production:

By walking up and down the central aisle of the workshop, it was possible to carry out a supervision that was both general and individual: to observe the worker's presence and application, and the quality of his work; to compare workers with one another; to classify them according to skill and speed; to follow the successive stages of the production process (1984, 145).

This observation of behaviour builds up into an wealth of statistical information on individuals. Norms of behaviour are derived from this information. Judgement is passed as to whether individuals are acting in accordance with 'normal' behaviour. Surveillance results in what Foucault calls the 'objectification of those who are subjected' (1984, 197). Individuals make choices on the basis of what they believe is their own free will. But they actually make these choices according to the norms established by the disciplines through their observations. In this way, individuals are subjected to power-knowledge but also created by it. Thus, for Foucault, 'humanism is a failed philosophical project because it takes Man to be its foundation for knowledge, whereas he is one of its effects' (Simon 1995, 25). Observation and judgement culminate in the examination: 'the examination combines the techniques of an observing hierarchy and those of a normalising judgement' (Foucault 1984, 197). It consists of teaching the individual the norms by which he is supposed to act: 'the examination enabled the teacher, while transmitting his knowledge, to transform his pupils into a whole field of knowledge' (1984, 198). Furthermore, the examination involves individuals reporting on their own behaviour and thus adding to the knowledge held about them: 'the examination that places individuals in a field of surveillance also situates them in a network of writing: it engages them in a whole mass of documents that capture and fix them' (1984, 201). Foucault's new conception of power "makes" individuals both as objects and as instruments of its exercise' (1984, 188).

A failure to meet with the norms established by the disciplines results in punishment which 'is aimed neither at expiation, nor even precisely at repression' (1984, 195). Rather, disciplinary power operates through 'the constraint of conformity' (1984, 195). As Amariglio puts it,

the mad are silenced by reason in two ways; they are institutionalised by the practitioners of reasoned discourse so that their voice is silenced outside their cells. And the mad are further silenced by the master discourse, the science, that studies the words of the mad only to superimpose the voice of reason over that of the mad (1988, 604).

There is an element of disciplinary power which appears hierarchical but the crucial point is that those who engage in surveillance are themselves watched:

For although surveillance rests on individuals, its functioning is that of a network of relations from top to bottom, but also to a certain extent from bottom to top and laterally; this network "holds" the whole together and traverses it in its entirety with effects of power that derive from one another: supervisors, perpetually supervised (1984, 192).

Thus, in Foucault's system, power does not have a single, identifiable locus. The power is the network itself. Those who supervise have no autonomous power, since the network 'constantly supervises the very individuals who are entrusted with the task of supervising' (1984, 192). A genealogical analysis involves a mapping of the network to identify the techniques of power. Foucault's proposal that we consider a 'how' as distinct from a 'where' of power has been questioned by his critics. According to Rouse, Foucault's critics 'cannot (yet) conceive what power or knowledge without sovereignty could mean. So the question that needs to be posed is how Foucault thought his account might successfully go beyond sovereignty' (1994, 105). But Foucault does not set out to describe alternatives to sovereignty; nor does he seek a theory of power:

Those who come to Foucault's work looking for solutions will be perpetually disappointed. Foucault's project - in both his politics and his histories - was not to lay out solutions, but rather to identify and characterise problems (Gandal 1994, 273).

IV.

This section uses Foucault's conception of power to describe co-operative competition in industrial districts. Industrial districts are described as 'geographically defined productive systems, characterised by a large number of firms that are involved in various stages and in various ways, in the production of an homogenous product' (Pyke et al. 1992, 2). The existence of two characteristics in particular identify this type of industrial network: a social milieu, and the existence of both competitive and cooperative elements in inter-firm relations. It is argued that small local firms compete successfully on the world market because they gain competitive advantage from external economies of scale and scope, and because vertical and horizontal co-

operation combined with horizontal competition between the firms ensures continual innovation.

The concept of an industrial district, which was first described by Marshall in the late 19th century, evolved in the late 1970s as a means of explaining the economic success of what is now known as the 'Third Italy' (Brusco 1982, 167). The concept has since been used to analyse local economies throughout Europe (by, for example, Benton 1990, Kristensen 1990, Murray 1990, Schmitz 1990). It has also been applied to local economies in Africa, the US and Latin America (see Sverisson 1992, Castels and Hall 1994 and Nadvi 1992, respectively). This work is inductive - it presents no theoretical framework for the analysis of co-operation between firms. Instead it entails descriptive accounts of the types of co-operation found in different industrial districts. Emphasis is placed on what such co-operation involves, as opposed to how it arose in the first instance, whether co-operation is common, and how co-operative relations are maintained. Competition and co-operation have long been presented as dichotomous, but the industrial district literature shows examples of where they harmoniously coexist. Traditional definitions of power, which form the basis of traditional models of competition, cannot explain the initiation, development or maintenance of this coexistence. The identification of co-operative competition necessitates a re-definition of power relations in industries in order to rationalise the strategy selected by these firms and to provide a theoretical explanation for the empirical evidence. A Foucauldian framework may provide a suitable alternative definition of power.

The first issue to be dealt with is the extent to which the Foucauldian concept of network corresponds to the concept of the industrial district. For Foucault, power is reflected in the network itself, rather than belonging to any dominant member of the network. Likewise, in most industrial districts, no one firm or group of firms is in a dominant position. Firms within the district do not operate autonomously. The subcontracting process of production means that firms operating within the district specialise in different stages of the production process. This type of production process necessitates a flow of information between firms on products and production techniques. This interaction of firms is well-documented and is often put forward as the principle reason for the economic success of industrial districts. Amin, in his study of industrial districts in Italy, holds that 'the single elements of the system flourish as a

result of their interdependence; not because any one of them, however competent, is capable of playing on the stage alone' (1989, 119-120).

However, this lack of autonomy alone does not ensure that power is not held by dominant firms in the district. Certainly, some industrial districts, for example, the Baden-Wurttemberg district, are characterised by a few dominant firms who produce the final good and a network of smaller component suppliers. Herrigel considers the dispersal of power in the Baden-Wurttemberg district. His definition of power is the following: 'the capacity to participate in the (re)definition and (re)composition of the organisational and institutional structure of the industrial system itself' (1993, 226). This suggests that power is diffused across all participants in the district. This is supported by the following statement: 'final decision-making authority or responsibility for the reproduction of the system is not located in any single organisation within the system' (1993, 226). This suggests a collective power of the type Foucault put forward. However, Herrigel does go on to make a distinction between those with power in the system and those without: 'those with less power in the system are those without direct organisational access to it, such as workers, women, environmentalists and their organisations, the trade unions and community organisations' (1993, 233). This indicates a 'power as capacity to dominate' definition. For Herrigel, it is the 'powerholding actors' who decide on the structure of the industrial system; he talks about the 'efforts on the part of contestants for power to maintain (or enhance) their position in the system' (1993, 233). He outlines three characteristics of the Baden-Wurttemberg industrial district: 'co-operation; openness/trust; and self-policing through fear (prudence)' (1993, 233). Thus, power in the district is defined as power as capacity by some firm, group of firms, or authority, which is operated through coercion¹. This conflicts with the Foucauldian network.

In some industrial districts, power does not reside with the producer of the final good. For example, Cappechi, in his study of the Emilia-Romagna industrial district, observes that 'the factory that produced the final good did not necessarily constitute the centre of the sub-system because its role was often only that of assembling various parts produced by other firms, and some of these parts were so vital that their producers could set their own prices' (1989, 201). This suggests a shift of power from one group

of firms to another, rather than a change in the nature of power itself. As with the Baden-Wurttemberg example, this does not correspond to the Foucauldian network.

Most industrial districts are, however, characterised by a number of similar-sized firms acting interdependently and without a dominant party. While lack of a dominant firm is not the overriding feature of industrial districts, it does raise an important distinction between types of industrial districts on the basis of types of competition which occur and the type of power relations they reflect. It is the latter type of district which we argue might fruitfully be investigated using a Foucauldian framework.

We argue that Foucauldian power is synonymous with co-operative competition. This occurs in the following way. In the Foucauldian industrial district no one firm or group of firms has the power to dominate. All firms behave according to established norms which are maintained by the social and commercial relationships formed within the district over time. Co-operative competition develops as a norm, in a way that is directly analogous to the development of norms in society described by Foucault. Through these norms, the operation of power within the district controls firms, not by coercion, but by influencing their decisions to behave. Firms act in the same way as Foucault's individuals - as if according to their own free will. Traditional competition could not develop as a social norm under this type of power relationship, because, under non-constant returns to scale, one firm or a group of firms would eventually come to dominate the district⁴. The district would, in this case, conform to the traditional definition of power.

A review of the literature shows that many districts could be described as Foucauldian industrial districts in that power does not rest with any one firm or group of firms, but to what extent are social bonds of the Foucauldian type found in industrial districts?

The literature on industrial districts highlights a web of relations, both social and commercial. It is this variety of relations which reduces the likelihood of traditional types of power relations. Social relations between firms exist primarily between family members, previous employees, former colleagues and friends who grew up together and now own firms in the same district. Owners of firms who know each other socially are more likely to share information and thus co-operate informally, by, for example,

lending tools or helping out to ensure an order is finished on time. Interestingly, Kristensen points out that in many cases individuals do not consider these activities to be 'co-operation,' rather it is just 'helping relatives or friends' (1990, 152). This suggests that the norms are so embedded in everyday commercial life that they are not recognised as such by those who act according to them. Firms, through social and personal ties, willingly divulge information about their business practices.

It is clear that what is deemed to be acceptable behaviour is developed over time within the district. For example, in Santiago, Wilson points to the development of norms for working conditions and pay which actually facilitated the growth of small firms within the district:

loom work was arduous and under-paid; there was no way that workshop owners could reimburse male workers with wages on a par with migrants' earnings. Instead, it was generally accepted that owners would give assistance at some future date when the worker wished to separate to start his own business. A 'good' worker could expect a credit advance and/or machines which a 'good' owner would settle on him on easy terms (1992, 61).

If other employers do not adopt this strategy, then they run the risk of not being able to find reliable employees in the future and other firms may be less willing to work with them. The spatial concentration of firms within a district means that information on behaviour flows freely. Spatial concentration, along with the subcontracting process of production, acts as a means of surveillance of the behaviour of firms. This ensures that informal arrangements such as those in the Santiago district are adhered to.

This corresponds to Foucault's description of surveillance as a means whereby individuals remain under the influence of the discipline. Within the district, it is the importance of maintaining a good reputation which ensures that firms behave according to the norms developed in the district over time. Specialised production units mean that each firm requires the business of others. A reputation for late deliveries or poor quality could put a firm out of business. This is the ultimate punishment for failing to behave according to established norms. Whether conflict of this nature is controlled in the way Foucault describes, through surveillance, examination and punishment,

would require a closer investigation of how norms are maintained within districts. However, many descriptions of co-operative behaviour in the industrial districts literature do seem to imply that social bonds are generated and maintained in the way described by Foucault. For example, Ottati shows that 'a whole series of local institutions complement social control in the industrial district to ensure conformity to the custom of mutual co-operation in support of the collective capital of trust' (1994, 532).

To what extent can this co-operative behaviour be learned over time? Sabel (1992) looks at the development of co-operative links in four industry groups within the Commonwealth of Pennsylvania. The Commonwealth introduced a `Manufacturing Innovation Networks (MAIN) project' in 1989. In his study of this project, Sabel emphasizes the importance of trust in sustaining industrial districts. He argues that districts whose co-operation depends solely on self-interest will not survive conflicts which inevitably arise (1992, 239). The MAIN project encouraged the participants in the four selected project groups to study their industry together in order to develop trust among them. Sabel concludes that `it was this process which created the possibility for redefining collective identities and cleared the way for studied trust' (1992, 239). Sabel shows how, for the Lehigh project group, the study changed the focus of the participants:

the problem became less one of regularising sweatshops (the original "union" view), or outwitting an out-dated but still powerful monopolist (the newimmigrant view), and more a question of rethinking the collective needs of the new specialist firms in the Valley, their relation to one another, and ultimately their relation to the manufacturers and retailers in New York (1992, 240).

The study provoked the development of a collective consciousness which, according to Sabel, is a precondition for trust. One could also imagine how such a process facilitated the development of mutually agreed upon norms of behaviour which would also strengthen the district.

There are also more formal, commercial relationships between firms within districts which are administered by associations and government agencies. In these cases, co-

operation is more clearly identified, though not necessarily more powerful than, social and personal relationships. In Ikast, in Denmark, the co-operative association, Danikast, has facilitated the collective purchasing of raw materials and the organisation of transportation for employees (Kristensen 1990, 150). In the Emilia-Romagna district, small entrepreneurs established an association to provide administration and accounting services (Brusco 1982, 173). These firms are competitors, subcontractors, suppliers and customers of one another but they co-operate in order to facilitate efficiency and competition. This is the essence of co-operative competition - the realisation that firms cannot survive unless they co-operate and compete.

These associations and government agencies appear to fulfil the same role as the disciplines in Foucault's framework. They facilitate the collection of data both on the firms in the district and on the industries in which they operate. They facilitate surveillance. They formalise and maintain the norms of behaviour for firms within the district. In several cases, government agencies have been instrumental in initiating cooperation between firms. In Cyprus, government policies actively encouraged furniture firms jointly to open a retail outlet for which they would produce specialised products (Murray 1990). In West Jutland, government funds 'were made available for financing an export agent if four firms worked together in co-operative export promotion' (Kristensen 1990, 152). In this case, as soon as government support for this cooperation stopped, most firms reverted to the traditional form of competition without cooperation. Co-operative competition was artificially created by government agencies and the norms arising out of this government policy were not deeply embedded in firms' decision-making strategies. This suggests that, at least in the case of West Jutland, the agency had its own ideology which it tried to superimpose on the district. This corresponds to the way in which disciplines change our behaviour according to their definitions of what constitutes acceptable behaviour in the Foucauldian network.

The Foucauldian approach allows for power to be external to individual firms but internal to the district. Because power is not internal to any individual firm it is possible for trust, and therefore co-operation, to co-exist with competition. For example, in West Jutland, where a number of firms compete to win an order, 'a winning firm often has to use as subcontractors some of the firms which competed with it for the customer, in order to be able to deliver the promised goods' (Kristensen 1992, 151). In this case, a

traditional model would argue that the firm which wins the contract has the power to decide which firms to subcontract its work to. It may even, if this is more 'neoclassically' efficient, decide to use flexible specialisation to internalise the job. In practice, however, the firm which is awarded the contract can only tender for the contract on the basis that it believes that it will be able to call on the assistance of competing firms to ensure the order is competed in time. This example shows clearly the interdependence of co-operation and competition. We argue that this interdependence can only exist if power is dispersed across the district as opposed to residing with any one firm or group of firms.

This brief look at the existing literature on industrial districts would indicate that many exhibit features of Foucauldian power. Foucault argues that individuals are subjected to the power-knowledge at work in the social network, but are also created by it. Likewise, firms in many industrial districts are dominated, not by larger firms, but by the norms of behaviour which they themselves have developed as a means to greater commercial success. Those norms reflect Foucault's power-knowledge, and it results in co-operative competition. Without co-operative competition, these firms would not be internationally competitive. Thus, they are both subjected to, and created by, the power of the district. Their subjection arises, not out of fear, rather out of their own 'freedom' to act according to the norms of the district. It seems that many industrial districts behave as Foucauldian micro-powers.

V.

This paper argues that the concept of power has been inadequately analysed by the disparate literature on industrial networks. It suggests that the Foucauldian framework might provide a useful analysis of how some types of networks are established and maintained. It is appropriate to those networks where co-operation between firms has developed through informal interrelationships rather than through the traditional model of coercion of large firms over small. In other words, it provides a tool of analysis in those circumstances where power clearly operates, but not in the form of power as dominance or repression.

The Foucauldian analysis provides an underlying rationale for the existence of cooperative competition. Although the fact that firms within certain types of networks cooperate and compete has been well noted in the literature, researchers have tended to treat the two as autonomous or even conflicting concepts. As a result, the traditional, neo-classical definitions of competition have been retained. In contrast, in co-operative competition, the two are not mutually exclusive but rather are opposite (but not opposing) sides of the same coin. The industrial district literature has identified the interdependence of co-operation and competition, but has developed no underlying theoretical framework with which to analyse this empirical phenomenon. An analysis of power relationships between firms should form a part of any theoretical framework, since it is power relationships which are intrinsic to the type of competition which develops.

Our survey of the literature on industrial districts leads us to suggest that many industrial districts could be characterised as exhibiting Foucauldian power relations. In these districts, power is held by the district itself, rather than by a dominant firm or group of firms. This facilitates the development of co-operative competition, which is generated and maintained by the social and commercial norms developed in the district over time. Firms willingly behave in accordance with these norms. Behaviour is not determined through coercion and fear but instead through the operation of the norms, the district controls firms' decisions to behave. Associations and government agencies take the role of Foucauldian disciplines to ensure that norms are adhered to. In certain cases, it is these agencies that are responsible for meting out punishment to firms who behave in an unacceptable way. However, whether the Foucauldian techniques of power - observation, judgement and examination - appear in industrial districts would require a deeper examination than the one presented here. The next stage is a genealogy of industrial districts. We believe that such an approach would provide a useful theoretical underpinning to the description of firm behaviour in industrial districts.

The adoption of a Foucauldian framework, however, goes far beyond the utilisation of a handy method for identifying and classifying the norms of behaviour found in industrial networks. It involves the acceptance of a poststructuralist agenda for industrial analysis. For Foucault and the others of the poststructuralist school, on the other hand, reality is something we create; it is not an independent entity. Foucault's aim was to reveal the structural laws or codes which create and maintain the reality we

observe⁵. Even the social and human disciplines themselves are a part of that process of creation and maintenance. They facilitate surveillance and the creation of the norms which govern acceptable societal behaviour. Thus the adoption of a Foucauldian framework necessitates consideration of the role of those disciplines which are involved in the discussion about new forms of competition, in creating the new forms of competition they are discussing. It prompts us to look for an `epistemic rupture' (Kearney, 1994, 29); that is, a change in the cultural laws and codes which allowed for and encouraged the development of new forms of competition. In a Foucauldian analysis, the question is not which theories should be developed to explain the cooperative competition we observe, but rather how did the theories of the disciplines and other cultural developments create, facilitate and justify the co-operation between firms that we observe?

ENDNOTES

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² Lukes' definition of power is the following: `I have defined the concept of power by saying that A exercises power over B when A affects B in a manner contrary to B's interests' (1974, 34).

³ Sewell and Wilkinson describe the panopticon as follows: `it comprises a central observation tower surrounded by a concentric ring of peripheral cells. Observers reside in the tower and gaze directly into every cell. Meanwhile, these cells are only open to the front, where the incarcerated individual has a clear view of the tower but is shut off from contract with any other inmates' (1992, 273).

⁴ Herrigel's characterisation of power in Baden-Wurttemberg as power through dominance is supported by Schmitz, who describes the district as consisting of 'interesting webs woven by four large spiders: Daimler Benz (Mercedes), Bosch, SEC and to a lesser extent, IBM' (1992, 99).

⁵ Under constant returns to scale, power does not reside with an individual firm or group of firms within the district, but it does reside with either a monopsonistic buyer or with the consumer. This too suggests power as the capacity to dominate.

⁶ The aim of archaeology was to reveal a general system of codes underlying particular interrelationships. In later writings, Foucault abandoned this structuralist notion of a universal set of codes, for a poststructuralist one. Hence, genealogy was concerned, not with the development of a general theory of society but rather with tracing the development of particular laws and codes in particular sub-sections of society, e.g. the asylum, the prison and the army camp.

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