RESEARCH PARADIGMS IN EDUCATION: A COMPARISON AMONG FOUCAULT'S POSTMODERNISM, POSITIVISM, INTERPRETIVISM AND CRITICAL THEORY

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ABSTRACT

The concept of paradigm in research is one that many postgraduate students as well as emerging researchers find difficult to understand and apply in their research proposal and/or research writings. In recent seminars, I have observed that students in higher degrees find the concept of research paradigms, particularly the postmodern paradigm, as difficult to explain. This conceptual article focuses on what Foucault (1970) refers to as "discursive formations" and discusses the constitutive elements of discursive formations are. The similarities and differences between Foucault's view of knowledge and the views of knowledge held within positivism, interpretivism and critical theory are indicated as a way of making the paradigmatic language for these positions comprehensible. Foucault's work (1970, "The Archaeology of Knowledge") is used to look at the educational implications of postmodernism, helping to understand the processes of learning and teaching, as well as what is considered as educational knowledge.

Keywords: Foucault, postmodernism, interpretivism, critical theory, discursive formation, knowledge

INTRODUCTION

With the explicit purpose of making the postmodernist paradigm comprehensible to postgraduate students and early career researchers, this article discusses the key tenets of Foucault's conceptualisation of the concept of discourse to demonstrate the differences among postmodernism, interpretivism, positivism and critical theory. Regardless of the stage or level of a researcher's experience, we all must be able to know and articulate our beliefs about the nature of reality, what can possibly be known about such reality and the ways in which we can go about gaining this knowledge (Kuhn 1974; 2012). This article is concerned with highlighting the need to understand the postmodern position, in particular, Foucault's view about the nature of knowledge. Considering that even providing a brief introduction of all the paradigms would be a colossal task for me, this article presents a comparative discussion of Foucault's

postmodernism, critical theory, interpretivism and positivism.

Each research paradigm has its own peculiar ways of realising its goals in an enquiry. Emerging researchers and postgraduate students should learn and own knowledge of paradigms and their key differentiating tenets in order to engage in research processes with systematicity. A clear understanding of the differences between paradigms can help early career researchers and postgraduate students to make informed decisions about their methodological choices. Also, understanding paradigms enhances researchers' reflexivity and self-awareness in conducting research studies, to become aware how their own positionality or worldview relating to the phenomena that they study can potentially influence their research (McGinity and Salokangas 2014; Rehman and Alharthi 2016). This links closely with Troudi's (2010) assertion that researchers should establish clear links between their paradigmatic dispositions, the theoretical framework espoused for their studies, as well as the chosen research design, methodology and method(s).

While previous writings such as Troudi's (2010) aver the need to make links between the different aspects of research, of concern is that the need for researchers to understand the different paradigms in terms of their differences is overlooked. A clear understanding of these links enables coherence in research conceptualisation, processes, and writing. The research paradigm determines which data generation, theoretical framework and analytical methods will be most appropriate for an enquiry, as it is a study's philosophical foundation. This discussion suggests that a researcher can only select an appropriate research approach, methodology as well as research methods once a paradigm has been established. While this is the case, I acknowledge that the research landscape and research paradigms are complex, and they can be challenging for both postgraduate students and emerging researchers to navigate with success (Davies and Fisher 2018). According to Patton (2002, 134), "When researchers operate from different frameworks, their results will not be readily interpretable by or meaningful to each other". Similarly, Rehman and Alharthi (2016) iterate that "As researchers, we have to be able to understand and articulate beliefs about the nature of reality, what can be known about it and how we go about attaining this knowledge. These are elements of research paradigms" (51). Ensuing that emerging researchers and graduate students develop a panoptic view of research paradigms is one way of ensuring that we produce quality graduates and developing emerging researchers to become formidable and knowledgeable knowledge constructors in the academy (Burton et al. 2022; Pyhältö et al. 2023).

RATIONALE FOR THIS ARTICLE

The rationale for this article is based on my informal observations when I presented research

paradigms to postgraduate students and emerging researchers in my community of practice. From previous presentations, I have noticed that many have difficulty in understanding what paradigms in research entail, their applications and the tenets that make the different paradigms peculiar and why it is argued that the different paradigms are incommensurable (Kuhn 1974). From my observations, postmodernism is one of the paradigms that are challenging for researchers, and more so for emerging researchers, and graduate students. This resonates with Wood's (1999) statement that "postmodernism has proved to be a snake-like concept whose twists and coils are difficult to pin down" (6). When postmodernism and Michel Foucault's concept of discourse are mentioned, many people become dejected because both the paradigm and the concept of discourse are positioned as difficult concepts, especially in the field of education. The difficulty associated with Foucault's concept of discourse and the postmodernist paradigm could be intensified by the dearth of comparative writings of postmodernism and the other paradigmatic positions, including positivism, interpretivism and critical theory in the field of education. Thus, this article focuses on the comparison among the postmodernist, positivist, interpretivist, and critical theory paradigms as an attempt to make the postmodern position accessible, especially the notion of discourse. To do this, the following two sections present discussions on Foucault's concept of discourse and the rules of formation of objects. I particularly use the rules of formation of objects to demonstrate the Foucauldian view of knowledge and juxtapose it to those held in critical theory, interpretivism and positivism.

FOUCAULT'S CONCEPT OF DISCOURSE

"Society is not, as sociologists often thought, a unified and well-rounded whole, a totality, producing itself through evolutionary change from within itself" (Hall 1992, 278). Postmodernism refers to the tendency in contemporary societies which rejects the previous, modern conception of the subject as having a unified and stable identity; instead, the subject is fragmented and viewed as having multiple identities which at times are contradictory, 'cross-cut', dislocate each other and are unresolved (Hall 1992, 276-280). The postmodernist perspective rejects the tenets of modernism such as objective truth, unified identity, and global cultural narrative/grand narrative; it thus focuses on the role of power relations, motivations and also language in attempt to understand the identity of individuals (Hall 1992, 275-276). The modern social classifications such as black versus white, male versus female, imperial versus colonial, right versus wrong, gay versus straight do not have currency in the school of postmodernism (Hall 1992).

"Whenever one can describe, between a number of statements, such a system of dispersing,

whenever, between objects, types of statement, concepts, or thematic choices, one can define a regularity (an order, correlations, positions and functionings, transformations), we will say, for the sake of convenience, that we are dealing with a discursive formation." (Foucault 1970, 38)

This article suggests that the way to best understand the differences between Foucault and other thinkers, like Marx and Hegel, is through the elaboration of the concept of discourse (Foucault 1970, 31-55). As a way of rejecting all references to transcendental principles of unity, Foucault provides the notion of discourse as a purely historical category that moves away from all transcendental principles of unity, be it substance or form. However, he sees the emergence of discursive frameworks as dependent on chance, contested association between a group of different artefacts characterised by uncertainty, contingency, complexity, and openness (Foucault 1970, 37-39). What Foucault foregrounds is that a group of statements are not in singularity, but they exist in their dispersion and are a way to link or join the statements that describe theories and concepts. Regularity between these statements is important as it is what ultimately describes the object. In his formation of the object of madness, Foucault explains how the regularities from the rules of formation describes the concept of madness.

Foucault asserts that individuals are not the sources of their own knowledge, meanings, and actions, but are rather products of the discourses they inhabit (Foucault 1977; Walshaw 2007). This means discourses, as Spivak (1987) notes, are not innocent or neutral explanations of the world, rather they are a way of "worlding", of appropriating the world through knowledge. From Foucault's (1972; 1977; 2000) position, the concept of discourse refers to the ways in which individuals constitute knowledge, "truth" and meaning.

Discourse also defines our conceptions of what we view as "normal" within our communities. The normality of educational knowledge and teaching cannot be taken for granted, because it presents the danger of inscribing classrooms as mere sites of social reproduction and enculturation. A postmodernist paradigm, and in particular Foucault's work, places emphasis on discourse and discursive practices (Foucault 1970). Discursive practices entail that in any social interaction there is "systematicity", that is, rules that govern the selection as well as the exclusion of concepts, norms, and objects and, in Foucault's words, this is called "the taboo of the object" (Foucault 1971). Foucault (1971, 8) contends that, "we know perfectly well that we are not free to say anything, that we cannot speak of anything, when and where we like, and that just anyone, in short, cannot speak of just anything". This statement suggests that since each field has its own rules, individuals' utterances and actions are constituted by these rules during social interactions, addressing the rules of disciplinary knowledge that govern what teachers can think and utter as they teach different subjects and topics in the school curriculum (Edwards and Usher, 2002).

The above discussion suggests that continuing to look at educational knowledge through objective lenses will only allow us to see reason; however, if we step outside prevailing dominant discourses about teaching and learning, it is not only the nature of researching educational issues that we would challenge, but the nature of education itself (Walshaw 2004; 2007). This resonates with Barwell's (2009) statement that discourse is not a "window on the mind", and any analysis comprises interpretations as well as questioning the constitutive effects of what individuals say in a specific context and within a particular time, to identify the unsaid, considering that there are rules of formation of objects, according to Foucault.

UNDERSTANDING THE RULES OF FORMATION OF OBJECTS

In "The Archaeology of Knowledge", Foucault (1970, 40-44) outlines the rules of formation of objects. In each discursive division, the rules of formation are explained as the conditions to which the objects, the mode of statement, concepts and thematic choices are subjected; the discursive formations that will help us to form the object (Foucault 1970). The first rule of the formation of the objects Foucault called the "surface of emergence" which "shows where these individual differences… will be accorded the status" (Foucault 1970, 41). The statement by Foucault refers to the site or domain that the definitions or explanations of objects come from. This means that any discursive statements that Foucault reveals rely on the space in which various objects emerge or are constituted and are continuously transformed through discursive practices. Of importance for him is that the surfaces of emergence differ from society to society, from time to time and in differing forms of discourses. This alludes to the fact that these statements come from different sites and different times and therefore they will have different meanings.

The second rule of formation of the objects is what Foucault called "authorities of delimitation" which can be explained as having medicine as an institution that acts as an authority of delimitation in that it is in the formation of the object, madness; medicine as a body of knowledge and practice "became the major authority in society that delimited, designated, named, and established madness as an object" (Foucault 1970, 2). The medical practitioners had the authority that constitutes the object. In this formation of the conception of the object of madness, the law practitioners put their own meaning to the concept of madness, basing their definition on "non-responsibility, extenuating circumstances, and with the application of such notions of the *crime passionel*, heredity, danger to society" (Foucault 1970, 42). In a nutshell, authorities of delimitation refer to the fact that there are power authorities in the different sites, as referred to earlier above. These power authorities can add to the formation of objects, for example, how religious authorities, the law, and the doctors can contribute to the definition of

madness.

The third and final rule of formation of the objects are the "grids of specification" which are explained as "systems according to which the different "kinds of madness" are divided, contrasted, related, regrouped, classified, derived from one another" (Foucault 1970, 42). These are systems with their own organising principles.

When looking at "the formation of enunciative modalities" the enunciative function which consists of enunciative modalities is defined by the statements which comprise a discourse when they are taken together, and the statement creates more than just a reality (Foucault 1970, 50). The way in which Foucault introduces the chapter on the formation of enunciative modalities is as if the emanation of statements is from active human subjects. The first questions that Foucault raises are, "Who is speaking? Who among the totality of speaking individuals is accorded the right to use this sort of language" (Foucault 1970, 50). The answers to these two questions become clear as the chapter develops, which is in terms of the positions of the subject and the institutional sites instead of the human subject as such (Foucault 1970, 51-55).

For example, in the formation of the object of madness, the doctor has the authority to give meaning to the object of madness as his status of being a doctor permits him to do so; and the institutional site in which the doctor engages in his discourse is mainly the hospital for discourse on disease to occur, but sometimes tests are conducted in the laboratory to check the blood of the individual. The doctor can also make use of the library, where previous cases have been documented and published as well as records about "environment, climate, epidemics, mortality rates, the incidence of disease, the centres of contagion, occupational diseases" (Foucault 1970, 52). The doctor can obtain information supplied by other practitioners from various structures of society, such as other doctors, public bodies, sociologists etc.

In attempting to understand what knowledge is, Foucault (1970) examines four hypotheses. His results or responses to these include that "from the multiplicity of objects it is not possible to accept, as a valid unity forming a group of statements" (Foucault 1970, 32). Unlike the positivists who view knowledge as objective and derived from sense experience, Foucault argues that there are different ways to describe the same object, meaning that one descriptor is not sufficient, and that the formation or description of that object is a result of the different interpretations in the first place. So, in the Foucauldian conception of knowledge, metaphysics that the positivists rejected as a system of knowledge, would be accepted as a means of explanation.

In addition, for Foucault, all ideas are subjective, including the notion of "truth - unlike for the positivists who perceive truth as being objective; for Foucault, truth is subjective to the

culture, experiences and the ideas of the individual (Foucault 1970, 41). Thus, he rejects the tendency of viewing individuals and things as unified subjects; the postmodernists celebrate the notions of differences, disorders, anarchy, discontinuities, and indeterminacy (Hall 1992). Postmodernism implies that "old identities which stabilized the social world for so long are in decline" (Hall 1992, 274), and this decline causes fragmentation of a stabilised and unified identity. The assumed fixed, coherent, and stable individual is displaced by a multi-identity that is flexible (Hall 1992, 275).

The second response moves away from the interpretivist conception of knowledge that when results arise that cannot be explained through the normal paradigm, a new paradigm may begin to form, which will originate with new proposed theories because of the anomalies encountered with the older theories (Kuhn, in Anon. n.d., 2). Kuhn argues that the old way and the new one are what he calls "incommensurable" - meaning that the scientist cannot operate in both the old and the new canon since there is no relationship between the old and the new canon. However, the Foucauldian second response states that "if there is a unity, its principle is not therefore a determined form of statements" (Foucault 1970, 34). This attempts to explain that knowledge is complex and varied, that we cannot simply accept the statements as they are, there are other considerations that have to be made when trying to describe an object; meaning that dispersed and heterogeneous statements can coexist (Foucault 1970, 34).

Another difference between interpretivism and Foucault's view of knowledge is evident in the third response, "appearance of new concepts" (Foucault 1970, 34), which addresses the acknowledgement of new rules, structures that govern knowledge. Language and contexts evolve over time, therefore our descriptors for objects and knowledge need to also reflect these changes. According to Kuhn (as cited in Anon., n.d., 3), the scientist is to solve scientific problems under the current paradigm and not the one that proved incapable of solving the problem. With this interpretivist conception of knowledge, it is thus impossible for our descriptors for objects and knowledge to reflect the changes of language and contexts as Foucault asserts. Kuhn's belief that the old and the new paradigm are "incommensurable" means that when a paradigm shift occurs there is a radical change, and thus there is no common ground for deliberation and debate (Jacobs and Farrell 2001).

The fourth and final response is that there is "a field of strategic possibilities" (Foucault 1970, 37), and that they do not come together as consistent themes. Foucault explains that the statements do not always come together as neat and coherent themes. However, as Hahn, Carnap and Neurath (1929, 5) argue, in positivism "neatness and clarity are striven for, and dark distances and unfathomable depth rejected", and that themes always assume "more than one is aware of" (Foucault 1970, 35). Again, Foucault's view that statements do not always

come together as neat and coherent themes varies from the conception of knowledge by the positivists. For positivists, different observers exposed to the same data should always come to the same conclusion; positivists place a lot of emphasis on coherence (Usher and Scott 1996).

Postmodernism seems to have some commonalities with critical theory and interpretivism, in that it also treats each situation individually, and moves away from the "grand narratives" or absolutism of knowledge emphasised by the positivists. Interpretivism is subjective to an individual lived world, which is similar to postmodernism; for Foucault, truth is subjective to the culture, experiences and the ideas of the individual (Foucault 1970, 41), whilst critical theory is of a go-getter type of epistemology. It looks at dialectical influences of different aspects. For example, in a pedagogical approach, it could look at the reciprocal relationship between the teacher and the learner, how the teacher and the learner influence each other in return. If the educational research employs positivism, any unobservable scenario cannot be studied, but postmodernism would consider the metaphysical account to explain this. It is evident from Foucault (1970, 42) that in the formation of the object of madness the religious authority also gives their meaning to the concept of madness. For Foucault, the question of what the argument is better for is what is considered essential. This view thus moves away from the positivist dream to have a pure language of observation.

The awareness of the individuals in the society according to critical theory is about the prevailing social structure, which Gibson refers to as *emancipation,* and is the one that triggers some sense of agency for change among the members of the society concerning the issue at hand. However, for Foucault, the subject could achieve any degree of autonomy, but the sense of agency or freedom is shaped or constrained by the prevailing social structures of regulative control (Foucault 1970, 170-195). "We must cease once and for all to describe the effects of power in negative terms: it "excludes", it "represses", it "censors", it "abstracts", it "masks", it "conceals" (Foucault 1970, 194). Foucault sees power and knowledge as inextricably linked; hence he introduces the notion of power/knowledge. And also, for the Foucauldian framework, speaking of "obliterating" power would not make sense since for him power is a never-ending feature of human interaction. Differing too with the critical theorists, Foucault does not envisage the arising of the individual's agency as a consequence of the flaws of the authority body; the individual cannot undermine the authority figure of their respective archives since Foucault argues that the controversial events occur within the same, single discursive formation (Foucault 1970, 32).

During the nineteenth century, Foucault introduced a new type of power which he called "disciplinary power" and which can be described as the power that is concerned with how the authority figures use power within various institutions to discipline, and regulate their

subordinates into specific objects. It is "concerned with the regulation, surveillance and government of, first, the human species or whole populations, and secondly, the individual and the body" (Hall 1992, 289). One of the institutions in which "disciplinary power" is located are the schools, where the learners are always under surveillance and constant observation by the authority body, mainly the teacher. Foucault states that the school administrators and teachers use their "disciplinary power" to discipline the children into the object of a student, they use this power to "normalise" the students into the expected ways of conduct within the school and the external world (Foucault, 1970, 177-184). Foucault terms the schools "normalizing institutions".

> "In short, the art of punishing, in the regime of disciplinary power, is aimed neither at expiation, not even precisely at repression. It brings five quite distinct operations into play: it refers individual actions to a whole that is at once a field of comparison, a space of differentiation and the principle of a rule to be followed. It differentiates individuals from one another, in terms of the following overall rule: that the rule be made to function as a minimal threshold, as an average to be respected or an optimum towards which one must move." (Foucault 1970, 182-183)

Foucault (1970) argues that the way schools are organised is regimented and institutional, the students are cultured into specific systems that they must abide by from time to time; they are segmented into a specific precise time period for classes (178). As a way of disciplining the students into being cautious of the time for their classes, if one comes to class late without notice they will be reprimanded, "M. Oppenheim will be "marked down" for a half-day" (Foucault 1970, 178). In addition to this, the classroom arrangements are rigidly hierarchical; the students are expected to face the front of the classroom, gazing on what the teacher - who is the authority figure, and standing in front of the class - does during the process of teaching and learning. The teacher keeps constant observation of what the students do in class to keep them focused on the process of meaning making in the classroom. Since the teacher stands in front of the learners, it becomes easier for him or her to monitor all the activities that the learners engage with, to see who is engaged or disengaged in the lesson (Foucault 1970, 170-184).

The student who does not complete the work given to him for homework "must be forced to learn it, without making any mistake, and repeat it the following day; either he will be forced to hear it standing or kneeling, his hands joined, or he will be given some other penance" (Foucault 1970, 179). Any penance that the student is given acts as a way of disciplining them into specific student codes, to acculturate the student to expected norms that the school requires the student to live by. For example, at UNISA when a student has been caught plagiarising in writing an assignment or exam, he might be required to avail himself before the Disciplinary Committee where he is disciplined into a student object who knows that

plagiarism is wrong, or he gets expelled. So here the plagiarism protocol is in place to discipline students to always acknowledge the work of others.

Rote styles of learning and retention are reinforced by many teachers through the testing procedures that they use since the emphasis is on facts rather than concepts. The implication of this is that the children are taught for the nationally standardised examinations rather than for intellectual development. Foucault (1970, 181) states that the "disciplinary apparatuses" differentiate between the "good" and the "bad" subjects in relation to one another, in the same way as assessing the acts of the students with precision of expected behaviour hierarchises the "good" learners from the "bad" ones. This measure acts as a way of disciplining the students into objects of a student who should behave in a manner that is expected by the school, and work very hard towards becoming the "good" student.

In addition, the hierarchising of the students according to "very good", "good", and "bad" becomes a form of disciplining the children into the object of a student. The children who belong to the "bad" class flatter themselves that they will be part of the other two classes; and the school makes them think that they reached the other classes due to the change of behaviour, and "those of the top classes will similarly descend into the others if they become slack" (Foucault 1970, 182). The aspects of positive and negative reinforcement of behaviour from constructivism is evident here, the hierarchising penalty can act as both negative and positive reinforcement. When the child behaves well and is placed in either of the two upper classes, his behaviour will be positively reinforced that he should always behave; and the ones placed in the "bad" class will strive to work to be placed in the other two classes. So, the hierarchising is a means of conditioning the students to behave and conduct themselves in the manner that is expected.

Postmodernism believes that knowledge is socially constructed and relative; this is problematic as it means that we would have to consider all the different interpretations that describe the world and the objects in it. How would we know what is true and what is not? For learning to occur, social interactions are crucial for the formation of knowledge. Shalem (1999) describes "performative pedagogy" as pedagogy that "assumes a multiplicity of understanding and foregrounds personalized statements and selreflexive tales" (Shalem 1999, 54). This type of pedagogy recognises that our classrooms are characterised by multiplicity, considering the multi-racial and multi-cultural learners that the teacher must cater for, and within that recognise individual learners and what they have to say. One challenge that this may pose is that the teacher may not be able to consider all of the learners' understandings and experiences. Within this context, how can the teacher know what is right or not, and when does she draw the line?

Shalem (1999) presents an argument that schools that are dominated by rational

pedagogies or male imposed pedagogy are disadvantaged as the conversation and dialogue in the class is controlled by the teacher. In contrast, performative pedagogy believes that the teacher should not direct the learning in the class but should allow for learners to engage and converse and let the learning take place through dialogue and personal narratives. However, a problem arises when performative pedagogy is taken too far, and Shalem (1999) examines the notion of the authority of the teacher in the classroom. In Felman's class, the teacher disappeared. The teacher believed they took a step back and let the learning happen. Shalem (1999) argues that this is not completely true as the feminist educator decides on the reading material or text that the group is going to engage with.

CONCLUSION

In this article, I have discussed what discursive formations are and looked at the elements that constitute discursive formations. An account of the similarities and differences between Foucault's view of knowledge and those held within positivism, interpretivism and critical theory were examined. With reference to Foucault (1970), the article discussed the educational implications of postmodernism, including some of the implications for understanding processes of learning and teaching, and what is considered to count as knowledge in education within the different philosophical positions discussed in this article. In essence, this article has sought to make a comparison among positivism, postmodernism, interpretivism and critical theory and has discussed the educational approaches that are linked to each paradigm.

Positivism emphasises the utilisation of scientific methods to collect empirical evidence and it assumes that there exists an objective reality out there that one can observe, and measure and that this reality can be studied using value-free methods. Conversely, interpretivism accentuates the importance of meaning-making and subjective experience in social research. This article also highlighted that the critical theory paradigm focuses on unearthing social inequalities and power relations and emphasises the need to challenge the dominant prevailing institutions in order to address issues of equality and social justice. Postmodernism interrogates the idea of objectivity and emphasises the centrality of subjectivity, context, and contingency in studying social phenomena. As discussed, postmodernism asserts that what we consider to be "reality" is social constructions through discourse and language, and that there are multiple ways of studying and understanding the world around us.

This article calls for the need to ensure that postgraduate students and emerging researchers understand the different paradigms, particularly postmodernism which is

considered to be challenging to comprehend. An in-depth understanding of the research paradigms can enable postgraduate students and emerging researchers to select theoretical frameworks, appropriate research designs, research approaches, and methods for their studies, which can result in more reliable and vigorous findings.

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