unfavourable. As this description suggests, a distinction between the two is not clear-cut.

Attempts have been made to distinguish indoctrination from education on the basis of intention, method and content, all of which Gosher (2) has shown are not sufficient without some consideration of consequences. Thus, content may lend itself to indoctrination, as might the methods employed, or the intention to do so, but it cannot be said that indoctrination has occurred unless there is some reason for believing that the indoctrinated person actually holds beliefs which cannot be shaken despite good evidence to the contrary. Such a person would view knowledge as fixed and unquestionable and although s/he might be able to give reasons for, or even enter into a discussion of the relevant ideas, s/he would steadfastly maintain those beliefs in the face of strong counter-evidence. In this case, the acquisition of knowledge would be equivalent to implanting a set of unalterable beliefs, accepted blindly and uncritically. The extent to which some, or all, of these criteria may be associated with C.N.E. and Pedagogics will be considered in Part IV.

Indoctrination is to be distinguished from socialization, which encompasses a wide range of activities under the heading of rearing or bringing up children so that
they become acquainted with the expectations and conventions according to which society conducts itself. This must be an inevitable consequence of being a member of human society. While it habituates individuals to various customs, such as driving on a particular side of the road, it is not concerned with promoting beliefs about those customs, although, of course, it may do so. Socialization does not rule out the possibility of disagreement, conflict or change, whereas this must be incompatible with indoctrination, which seeks to establish its beliefs as inviolable truths. Peters (3) makes a similar distinction between education and the educated man where the former corresponds to socialization and the latter displays knowledge and understanding through qualities such as, integrity, autonomy and the ability to think critically. An educated person, in contrast to one who has been indoctrinated, would hold his/her beliefs open to revision in the light of new learning. This means that such a person would be able to give good reasons for his/her beliefs, enter into open discussion and criticism, assess and evaluate the claims of others, follow logical arguments and make impartial judgements. Consequently, these beliefs are likely to be more flexible and adaptable than those held non-rationally. Indeed, the idea of altering a non-rational belief through appeal to reason makes little sense, as there is no good reason for holding it in the
first place; as such, indoctrination must stand in contrast to education.

In a situation where education is equated with indoctrination, an individual renounces all claims to rational behaviour, moral responsibility and personal integrity to become a servant of a particular form of control.

**Section ii) How a distinction between schooling and education may be drawn**

Concerned that very little of what goes on in schools may be described as educative, P.S. Wilson (4) wants to show that there is an inner logic to education which makes it compelling in itself. He distinguishes between schooling and education in terms of 'needs' and 'interests' respectively.

While his account of education is not that convincing because it is so narrowly defined in terms of interests, the distinction between schooling and education illuminates the distinction between power and authority. This will be more clearly illustrated in Section iii, but mention should be made here that the way in which needs are characterized runs parallel to a concept of
power, and interests are related to a concept of authority.

Needs are often construed unproblematically as providing empirical data independent of values. They are simply requirements that must be fulfilled, for example, the curriculum must meet the needs of children; unless, however, these needs can be identified and specified with reference to a particular goal or situation, they are meaningless. Needs may be described in terms of the individual, for example, needing a particular type of education, or in terms of society, as for example heard in the pleas for skilled manpower. On this view, the individual/society is naively regarded as a behaviouristic model driven by needs which demand satisfaction in terms of physical/psychological factors; teaching and learning are reduced to a notion of conditioning. And this state of affairs constitutes the justification for schooling and education. But, as Wilson shows, needs cannot be divorced from values and therefore, in isolation, provide a grounding for education, although they may offer some justification for schooling.

By contrast with needs, 'interests' cannot be regarded as motivating factors of physical/psychological force in urging children to learn, rather their 'raison d'être',
which undergirds education, lies in their perception as intrinsically valuable activities. Unlike needs which presuppose reference to external values, interests, in themselves, although they may turn out to be worthless except for their interest, and even detrimental to the achievement of other goals, offer good reasons for action. Wilson demonstrates this point clearly through the following example.

Needs and interests furnish different reasons for behaviour. For example, my reason for going fishing may be explained by 'needing fish' or 'being interested in fishing'. Both account for my actions, but the former only gives a partial explanation in that my need for fish might be as easily satisfied by going to the shop to buy some; it does not explain why I choose to go fishing. Indeed, if I were ill at the time, going fishing because I 'needed' fish would not be a good reason for going at all. On the other hand, 'being interested in fishing' not only explains why I am going, but it will always offer a good reason for going, although there may well be better reasons related to other factors, such as being ill, why I should not go.

The relevance of this example for a distinction between schooling and education is to show that they are logically speaking different processes. In the same way
that needs may offer a partial explanation of an action, but not a justification or good reason for it, as interests can, so schooling cannot give a sufficient account of education. Interests and education are explicable only in terms of their intrinsic values, the pursuit of which may involve constant risk in that outcome is never predictable or certain. This is not to say that to engage in education is an irrevocable action in the sense that it is logically compelling, for there are always other grounds such as prudence, morality, which might influence the selection of interests, but the guidance which these might offer is not educational. When these factors intervene, the commitment to education/interests may be diverted. On this view, teaching and learning cannot be mechanically conceived of as arousing an interest or fulfilling a need. Each demands an effort to structure experience in a meaningful and intelligible way and to exercise discrimination and selection in the pursuit of what is valuable.

Wilson sums up the difference between an educative and a non-educative situation as being the difference between what is 'interesting' and what is 'in someone's interest'. Although it may happen that the practice of each coincides, to claim that something which is 'in someone's interest' is also 'interesting', is to trivialize and devalue the meaning of interest. Similarly,
schooling and education may overlap, but when it is insisted that education is necessary for some extrinsic purpose, for example, a good job, Wilson claims that children are no longer being educated but schooled, and these are two entirely different and separate phenomena.

While Wilson maintains that it is possible for education to operate through schooling, Patoman, in a paper entitled "Can Schools Educate?"(5) is extremely sceptical about this. He argues that schools as institutions are causally effective mechanisms and that some of their characteristics are not only non-educative, but actually anti-educational. He bases these conclusions on three criteria of an educated person; namely:

1) that such a person should be keen to acquire new experience and knowledge,

2) should be able to evaluate this in the light of a life plan, and

3) should be capable of participating in free and equal discussion which may or may not alter existing knowledge; by which the social nature of the enterprise is admitted.
Because of the way in which schools are structured, Pateman claims that they are unable to realize any of these criteria; indeed they tend to work against them. For example, with reference to the third criterion, he focuses on the way in which the teacher, 'in authority' as a representative of social control or rates from a power base, irrespective of whether the teacher chooses to or not. Consistent with Peters's account of authority, referred to in the previous section, Pateman is subject to the same shortcomings in failing to distinguish between being 'in authority' and authoritarianism or power. Under these conditions the teacher's position shuts down opportunities for 'free and equal' discussion, since the students know that the topic, form, time and terms that any discussion might take, depend on what is allowed by the teacher, whose position is reinforced by power. This, and other characteristics, such as compulsory attendance, obligatory attention to the curriculum and enforced massing of the peer-group, are factors which may be causally connected with pupil alienation and which militate against the likelihood of schools to educate.

According to the way in which he draws a distinction between schooling and education and anticipates an answer to the question in the title of his paper, Pateman is forced to conclude that in terms of his
criteria of education, schools cannot educate, although he does soften this stand by suggesting that the supreme efforts of some teachers and pupils against all odds, may allow education to occur in schools. To what extent this may be true and still be compatible with Pateman's position, is not clearly spelled out, thus leaving a certain amount of ambiguity for the distinction between schooling and education.

For both Wilson and Pateman then, there is a possibility of education occurring in schools, although for Pateman more than Wilson, this seems to be largely governed by chance factors, such as the individual efforts of various teachers or pupils. Although neither accepts the conclusion of the deschooling argument, both are sensitive to these criticisms and through their distinctions between schooling and education, they are concerned to increase the opportunities for education in the context of schooling. While each has its limitations in this respect, I think Robin Barrow's account (6) goes a long way towards suggesting a convincing relationship (and distinction) between schooling and education.

Barrow argues for a conception of education broadly based on knowledge but narrowly defined as merely one, among other, important functions of schooling. These
include socialization (as distinct from indoctrination), child-minding, vocational training, physical instruction, social role selection, emotional adjustment and creativity and they are, by definition, excluded from the concept of education, although their contribution to the development of balanced individuals is of importance. Rather than referring to each of these functions in turn, I shall focus on those features which Barrow associates with the concept of education and which, by implication, are absent from, or not central to, the other functions in order to illustrate how he distinguishes between schooling and education.

Barrow is critical of the notion that education is connected with the whole man - instead he sees this as the responsibility of schooling. Education, by contrast, is cognitive i.e. it is to do with the mind, knowledge and understanding. An educated person possesses knowledge which involves more than facts and figures in that it implies a capacity to understand and exercise discrimination. It also covers a wide range of subjects rather than being narrowly conceived of as specialization. In these two respects Barrow is in agreement with Peters but he has reservations about the work of Peters and Hirst on 'forms of knowledge'.(7) While conceding that they were correct in identifying mathematics and the physical sciences as two distinct
forms of knowledge according to these criteria and that concepts peculiar to a subject offer a means by which its truth or falsity may be assessed, Barrow has doubts about the other five 'forms of knowledge' they delineate. Furthermore, he rejects their view that to be educated, a person must have been initiated into all seven 'forms of knowledge'. He shows that different people may be considered educated although their education omits one or the other of the 'forms of knowledge'.

In addition to a broad conception of knowledge and understanding, Barrow puts forward a further four elements which he regards necessary to being educated; namely:

1) a sense of one's cultural and historical identity so that an educated person would be aware of his/her location in the broader context of the universe;

2) a recognition of the uniqueness and individuality in others, even if this is to varying extents constrained by sociological and/or ideological factors;

3) an ability to recognise different kinds of logic, such as in moral, aesthetic and empirical questions;
4) a capacity for discrimination and the ability to go beyond superficial generalizations toward making fine distinctions.

Barrow claims that education so far has met with some measure of success in satisfying the first three conditions, but that it has fallen dangerously short in achieving the final element; with the result that people lack the ability to be sufficiently critical of such influences as crude advertising, political slogans and ideological justifications. This ties in with Fay's 'technological view of politics' mentioned in Part I, Section iii, where policy science encourages an unquestioning acceptance of the existing power relations. Consequently, Barrow advocates as an obvious goal of education, critical thinking, which he associates with intelligence, although he is careful to distinguish this ability from other concepts such as logic, lateral thinking, I.Q. and creativity.

From this account it must be obvious that education is not an automatic result of growth, but that it requires the acquisition of a specific type of understanding through guidance. Given this and, as Barrow argues, that it is valuable both for its own sake and on wider grounds of utility for a democratic society, he believes that it is too important to neglect. As such,
schools should be encouraged to provide education, despite their shortcomings, by constantly removing the obstacles which they present.

Barrow offers some useful criteria for articulating a difference between schooling and education. Specific to the latter are the following features which, I consider, are central to any account of education; namely, that it is a cognitive activity involving the mind through the acquisition of 'knowledge' and understanding. The notion of knowledge suggested here is broadly conceived of to include a rational acceptance of beliefs which are held provisionally, open to criticism and change so that the outcome of education can never be predicted with certainty.

'Being educated', however, cannot simply be equated with a breadth of knowledge; it involves a question of degree. This Barrow illustrates with reference to four additional criteria; the most neglected of which is the ability to think critically and discriminatively. On this view, people are not either educated or uneducated, but rather they are educated to a greater or lesser extent.
While Wilson and Pateman are critical of schooling because it operates as a causally-effective mechanism, inhibiting education, Barrow underlines its importance in conjunction with, but distinct from, education.

Section iii) Distinguishing between schooling and education on the basis of power and authority

Arising out of the distinction between power and authority (outlined in Part II) are two diverging conceptions of mankind. That which is implied in the concept of power perceives the individual in causal terms, while the conception of behaviour connected with the concept of authority emphasizes notions of agency and reason. Each conception represents an entirely different way of formulating human behaviour and may be used to illustrate the diverse processes of schooling and education. For those who cannot make the distinction between power and authority, there are further serious problems in differentiating between schooling and education.
That schooling may be described in terms of the concept of power is illustrated by the structures or external supports which it provides and within which education may or may not occur. It demands conformity to physical arrangements such as classrooms, separation on the basis of arbitrary factors like age, sex, race, intelligence, as well as to a set of fairly well-defined norms such as learning skills, e.g. literacy, passing examinations and acquiring qualifications. As such, the motivating force is towards the realization of extrinsic goals so that the participants in the process are subordinated to it and confined to responding within the definition of the situation. Their behaviour is conceptualized in terms of the structures provided by schooling, not as originating from the context of rule-governed activities embedded in the concept of authority.

Both Wilson and Pateman in their descriptions of schooling identify it with a causal conception of behaviour implied in the concept of power; for Wilson this is expressed in terms of needs-gratification and for Pateman in terms of causally effective mechanisms which structure relationships. In these circumstances, whatever the variations, the individual is deprived of purpose and choice and perceived as a passive recipient responding to the pressures of external constraints. Teaching and learning are reduced to training and
conditioning, shaping behaviour towards the realization of goals which are specifically defined in terms of utility. A simple means-end, stimulus-response model in which individuals are schooled, not educated, is postulated.

Education, by contrast, is associated with authority in that both involve the development and sharing of conceptual schemes, as illustrated in Part II. Children are not born with concepts but must acquire these in order to identify and classify events indispensable for participation in social activity. To have a concept of something is to recognize a group of common features that hold for a particular phenomenon regardless of variations and that enable one to discern those phenomena which do not count as the same concept. In other words concepts provide unifying principles for understanding how things are interconnected as well as standards for discrimination. Part of educating the child, therefore, as implied by the concept of authority, must lie in conceptual development and this does not simply mean increasing the number of concepts the child has, but also extending the kinds and complexity of the unifying principles available so that greater sensitivity and awareness emerge.
From this, it follows that education and authority relations are social phenomena, which as the discussion of positivism showed (in Part I, section iii), cannot be explained in terms of natural processes that seek to establish causal links or in terms of a concept of power that focuses on external structures. It makes no sense to attempt to account for education as a natural occurrence, because, like authority, it should be seen as consisting in rules which are formed from a moral point of view on the basis of which an individual is able to distinguish between right and wrong and to offer reasons for action, i.e. to behave rationally.

To the extent that education involves the development of conceptual schemes, it is inextricably bound up with the acquisition of knowledge, which needs to be interpreted in the broadest sense possible. Pring (8) makes this clear by following the distinction between "knowledge that" and "knowledge how" where the former, which suggests the ability to give the correct answer, is emphasized in the formal curriculum to the detriment of the latter which implies procedural knowledge. Very often, the students' knowledge of the latter is overlooked in asserting their ignorance of the former. For example, a child may have mastered the technique of riding a bicycle competently without being able to repeat the laws of mechanics.