

IDEOLOGY AND SCIENCE

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METASCIENCE

When discussing the relation between ideology and science it is essential to start with an exact definition of the two concepts. Much of the vagueness which has characterized the debate of recent years is undoubtedly due to an—intentionally or not—imprecise use of the concepts.

I propose to devote the following pages to an entirely theoretical analysis of the relation between science and its pre-scientific basis. In other words, I shall not so much deal with science as with what lies behind it as a guiding principle, the so-called metascience or philosophy of science, which, so to speak, puts science in inverted commas. I shall mainly concern myself with the social sciences and among these especially legal science, which, in the nature of things, I know most about.

What is known as metascience, or philosophy of science, does not, any more than does philosophy, constitute a subject of its own but is the science of science. Like philosophy it deals with the basis of science; it does not, however, treat the question of cognition as such as a central problem, but rather focuses on the methods applied by science. I mean the methods which are actually applied, but I might equally well have said: the methods which ought to be applied by science or the sciences. Thus metascience, according to the definition chosen, is a descriptive as well as a normative activity. In the former respect metascience is certainly a scientific activity, provided that it satisfies the other requirements of science, whereas in the latter respect it is, to speak in terms well known among scholars, not a theoretical but a practical activity. Any definition of the concept of science implies the use of certain criteria which must be fulfilled by an activity claiming to be a science. The definition, then, is so far as it goes normative to the extent that it makes certain qualitative demands on the activity in question. Another and separate question is whether science is and ought to be or can ever be value-free, i.e. is not to be carried

on with a specific purpose of either a moral or a political character. These two demands on science thus fall into different categories. In the first case, we have some criteria which may be varied and vague but are nevertheless objective in principle. It must not be overlooked, however, that every scientific activity must, in the last resort, fulfil a demand for truth which cannot without further proof be regarded as having no moral implications, although the concept of truth is an integral part of the scientific method. In the second case, however, the criterion is teleological, purposive in a wider sense. Here we meet a demand, beyond truth, on the purpose of science. This demand may aim at promoting the cause of a certain religion, a certain political movement, or a certain ideology. The demand may aim to make mankind better; it will then imply a specific anthropology. It is obvious that science *qua* science must have a purpose in itself no matter what further demands may be made on it. If the function of science is to increase our knowledge and so enable us to control our life and surroundings more effectively, it must, naturally, have the independent aim to achieve this goal in the best possible way. If we look upon science as a tool it must, like other tools, be designed so as to suit its purpose in the best way. Possibly the other demands which may be made on science will conflict with this purpose that is implied in the very concept of science. When framing a metascience, therefore, these purposes must be ranked in order of precedence.

2. SCIENCE

What, then, is science? Not every activity that increases our knowledge can be called science. It is unnecessary to state that an arbitrary and casual collecting of data cannot be characterized as a scientific activity. To be that it must be based on methodical work. Conversely, science may in principle concern anything, so that the determining criterion must relate to the method applied. The material studied must be collected and processed by means of accepted methods which can be communicated, reproduced, and re-examined. What definitely separates an intellectual, scientific activity from an intuitive, poetic, or religious experience is its communicability and intersub-

jectivity. Beyond these formal criteria there must be a material demand, as mentioned, that the scientific activity shall be methodical, i.e. be organized according to certain criteria adopted in advance. The purpose or result of the scientific activity must be to put the area studied into a wider systematic context, thereby enabling us to acquire an increased understanding of the phenomena studied or making it easier for us to predict or control these phenomena. As a matter of fact it is extraordinarily difficult to give a brief definition of the concept of science. Science is like the elephant: it is difficult to define it, but you recognize it when you see it! The point is that nowadays we have a number of different sciences, each with its subject and specific method. One cannot do much more than pronounce in general that science is a methodical activity pursued according to the methods which are for the time being accepted in the area in question. Obviously, such a pluralistic point of departure involves a risk of chaos or diletantism. On the other hand, historical and current experience shows the risk involved by monistic attempts to dictate one specific method for each individual science or for all sciences.

Until this century it was a common practice to divide the sciences into two groups: theoretical and practical sciences. The theoretical sciences examine the actual, existing relation between the phenomena, whereas the practical sciences try to state what the relation ought to be. The former group studies our cognition, the latter our acts. The former are causal sciences dealing with empirical causal relations, whereas the latter are final sciences claiming to be able to deduce general principles of human action from theories of God's will or the order of Nature or Reason. From the beginning of this century a distinction has generally been made between natural sciences on the one hand and cultural sciences on the other (Dilthey). This distinction was originally made in consequence of the difficulty of merging the generalizing methods of the natural sciences in the individualizing methods of, above all, historical science. Nowadays, when historical science as well as the other social sciences are increasingly applying generalizing methods themselves, the distinction is more often made between positivistic and hermeneutic methods. The key concepts of the former are certainty, description, function, predictability, and objectivity; those of the latter group are probability, understanding, explanation, and intersubjectivity. However, it is not

quite relevant to speak of positivistic sciences on the one hand and hermeneutic sciences on the other. Positivism is rather a general metascience or philosophy of science founded during the 1920s by the so-called Wiener-Kreis (Carnap, Wittgenstein, Popper). The linguistic expression is its point of departure. Only positive statements, that is to say assertions which can be empirically verified or which are analytically, i.e. logically, self-evident can be accepted as scientific statements. Metaphysical assertions which cannot be verified and statements containing evaluations are of no scientific relevance. These demands on science have been applied with great success in mathematics and the natural sciences since the day of Descartes. The new practice is to make the same demands for objectivity on other sciences: the social sciences and the humanities.

In opposition to positivism, various movements among the cultural sciences have framed a hermeneutic, dialectical or critical scientific ideal. The point of departure in recent times has to be looked for in the French and German phenomenology of the thirties and forties. To the functional description of its object adhered to by positivism, Heidegger raised the objection that any human activity is based on a conscious or unconscious intentionality. Human conduct is purposive. If, therefore, science confines itself to a description of human activity, that description will at most be a very imperfect one. It will be able only to answer the question how, not the question why. Science cannot deal scientifically with the interpretation of the meaning of the activity. Moreover, linguistic theory acknowledges that language is in itself filled with a hidden meaning and interpretation of reality. It is impossible to apply a linguistic expression without at the same time speaking intentionally. You cannot, for instance, mention the word "table" in a sentence without having also said something about the use of this piece of furniture. When analysing other words, concepts, and sentences, one must end up with the theoretical assumption that it is impossible to pronounce on anything whatever without having a preconceived opinion of it. This is the so-called hermeneutic circle. From this phenomenological identification of reality and its linguistic contents there have been drawn several conclusions which I shall not go into here. As it is of importance to what follows, however, I shall mention that, like Hegel, certain phenomenological schools are inclined to look upon the physical world

as created by the human spirit, an idea already described as megalomania by Georg Brandes in the previous century. Another branch of phenomenology, the so-called structuralism or semiology, seems to regard reality as a reflection of linguistic structures. A more relevant observation, perhaps, is the underlining by the ideology-critical Frankfurt school of the fact that the basis of cognition is interest. From this ideology-critical point of departure various conclusions have been drawn. The neo-Marxist school, which regards society as a class society and science as a tool in the hand of the ruling class (in Western Europe the capitalists), claims that science, the people having thus been made conscious of its purpose, should through revolutionary practice be put at the service of the working class according to the objective necessity of dialectic materialism. The Left-Hegelian negativism itself goes no further than to claim consciousness and explanation of the basis of science. In the last analysis, however, the adherents of this school, especially Jürgen Habermas, seem to have a more extreme belief: they hold that reason, as the basis of science, and the dialectic process of thought, as the material part of human nature, will necessarily lead to increased self-knowledge as well as to a more open society. The theory of science thus acquires a moral undertone owing to the belief that practical reason will lead to the maximum realization of the individual and social life through an open and dialectic process in the individual as well as the social sphere.

From what has been said so far it will be evident that while the two concepts "positivistic" and "hermeneutic" do not relate to a division of different sciences, but rather to different methodological details which may be applied by different sciences, yet, in the last analysis, they refer to a philosophical or metascientific distinction of principle between two different ideals of science. On the other hand, it is evident that the methodological details prevailing in positivism are especially dominant in the mathematical and natural science disciplines, whereas the typically hermeneutic and dialectic methodological details are especially relevant to the social sciences, the humanities, and theology. However, there is no reason why the social sciences should not formulate quantitative and behaviouristic problems as well as making hermeneutic and phenomenological descriptions. No more than it is possible to accept a monistic concept of science is it possible to accept a monistic metascience.

3. THEORY AND IDEOLOGY

A theory is an assumption regarding facts and their connection and interpretation, which forms the basis of scientific activity. A theory may be simple, relating to isolated facts, or complex, relating to more or less widespread connections. An ideology, too, formulates an assumption regarding the structure and connection of reality in an abstract linguistic form. According to the normal understanding, however, an ideology is a more comprehensive and continuous system of ideas based on a hierarchical set of value concepts forming the frame through which one looks at and estimates one's surroundings. I shall not otherwise try to equate a theory with an ideology, but I would underline the fundamental difference that a theory is an open assumption which, so to speak, calls for verification by experience, whereas an ideology makes demands on reality to fit in with its axioms. In case of a conflict between theory and reality, theory will yield; in case of a conflict between ideology and reality, reality will have to yield. There are well-known examples, in the past as well as nowadays, of ideologies trying to deny the existence of the cognition of natural science. However, it is more common that ideologies interfere with the social sciences.

Theories and ideologies, as mentioned, are necessary prerequisites, but no more than prerequisites, of our cognition. The formation of theories as well as of ideologies is in principle non-scientific, since it does not form part of a logical deductive process of thought nor can it be the result of the process of cognition of which it is a prerequisite. Everybody who has been involved in scientific activity, however, will confirm that the formation of a theory is mostly a result of a dialectical process between intellectual prerequisites and current insight into the facts studied, and that the final formation of a theory or hypothesis is actually the result of the ongoing research project and is in reality verified at the same time as the theory is formed. It would be absurd to try to deny that our original theoretical prerequisites were also related to our knowledge and education regarding facts in the area studied as well as in other areas and regarding life in general. On the other hand, it would be equally absurd to try to deny the creative function of imagination and associations, at any rate in the formation of quite new and comprehensive theories. In the last analysis,

then, the formation of a theory rests on a choice based on value concepts.

4. COGNITION AND INTEREST

The problem that has to be solved next is that of finding out what factors determine our choice of value concepts in the formation of theories as well as ideologies. It seems natural to lay stress on anthropology or human biology, i.e. the fact that man is created in such a way that he is able to feel certain needs and consequently to have certain interests.

As a matter of fact Kant's theory of cognition was an underlining in principle of the limits which are set to cognition by the human apparatus of cognition. To this must be added the biological assumption of the influence of our needs on the direction of our interests and so on our interest in the direction of cognition. It has already been mentioned that cognition is an activity which has an intellectual and therefore a linguistic character. Our cognition is, so to speak, limited by our linguistic capacity. What cannot be formulated in language cannot easily be made the object of cognition, although I am aware that a certain school of psychoanalysis presupposes the existence of a non-linguistic cognition. However, as far as I can understand this is not an intellectual but an emotional process. If we reserve scientific cognition for the intellectual sphere we shall probably have to accept language as a prerequisite of science. The analytical philosophy of language has been occupied especially with analysing everyday language on the assumption that it contains the cultural heritage of mankind which is held to have settled into the language through the progress of culture and consequently of cognition.

It has been said that there is a probable connection between the grammatical structure of the Indo-European languages—the distinction between subject and object—and the concept of causation derived from that. To all appearances this has been of importance to the development of Western technological culture, the fundamental basis of which is this concept of causation and consequently the idea that man is able to control his surroundings by his own efforts. This example is illustrative whether one looks upon the grammatical structure as the primary factor from which the technological culture is

derived or whether one takes primitive technological experience to be the mother of the concept of causation as well as of the linguistic structure. In our time, at any rate, there is no doubt whatever that tradition has an independent influence on the trend of thought and consequently on the formation of theories. At all events we must conclude that tradition and upbringing are of essential importance for our linguistic orientation and consequently for our formation of theories. However, it is interesting in itself to call to mind that modern linguistic theory—I am thinking especially of Chomsky's transformational grammar—conceives of linguistic capacity as a part of human nature which like other qualities is latently present in the biological inheritance and which will develop when stimulated at a certain age. Chomsky's assumption seems to me to have a good deal to recommend it, and if it is valid the conclusion must be drawn that language is not merely a conventional means of communication but an organ bound together by particular structures which are in their turn inherent in the biological code. Whatever the relationship between our biological needs and our linguistic capacity, these relationships being more or less close, we must assume that the possibilities of language are unlimited, apart from certain limits set by the biological code. Whether this may mean that we are actually able to formulate questions regarding things we know nothing about, and whether if so the so-called hermeneutic circle is broken, I would not venture to say. As I understand the matter, it must in any case be assumed that the linguistic capacity can only develop through linguistic education, which simply means that the cultural heritage is built into the language. The above-mentioned Frankfurt school, in particular, with its ideological criticism has underlined the ideological prerequisites of cognition. To be sure, the ideological criticism is especially levelled against the metascientific question of the scientific method: *positivism versus negativism*. When science deals scientifically only with positive facts, it will remain conservative; this leads to false consciousness as the growth of society overtakes cognition, and this again leads to individual as well as social frustration or alienation and, ultimately, oppression. In living up to the demand for value-freedom or ethical neutrality, science comes to play the game of reaction. In connection with the philosophy of Adorno, there was formulated a negativism according to which the ideal science must be in search of alter-

natives of every established order. An important means in this negative activity is to unveil the ideological and interest-directed assumptions which are probably the leading factors in the scientific formulation of questions. It is evident that this negativism not only is levelled against scientific activity as a whole but may equally well be directed against any theoretical formulation. To put it briefly, our ideological and other value concepts are prerequisites of our formation of theories.

5. MARXISM

What is known as Marxism may be used as an illustration of the relation between scientific theory and political ideology. In its original shape, Marxism was a theory, especially a theory of history. The two fundamental assumptions of Marx's theory of history and society were as follows.

(1) That human culture was not, as the idealists assumed, derived from prevailing ideas but that, on the contrary, the ideas were derived from the material socioeconomic conditions prevailing at the time in question—were in fact a superstructure built on top of this basis. The culture and, with it, the ideology of a society are derived from its material conditions of production.

(2) That history must necessarily pass through a dialectical process of development in which the material conditions of production pass through successive phases, viz. a hunting stage, an agrarian-feudal stage, a capitalist stage and, finally and inevitably, a socialist stage. Concurrently with the development of forms of production, the social forms change from a feudal state dominated by an aristocracy via a capitalist society with middle-class convictions to a socialist society with complete democracy. According to this analysis, mankind suffers oppression in the first two of these stages. Thus in the feudal era it was oppressed by the aristocracy and in the capitalist society it is oppressed by the state, which was created precisely as a means of oppression (since the public and private interests of the subjects conflicted). The socialist society, on the other hand, by abolishing private ownership of the means of production, simultaneously ends the conflict between the private and public interests of the citizens, and as a result the state will wither away in a future communist phase.

A social theory of this kind is based, just like any other comprehensive scientific theory, on an anthropology, i.e. a certain conception of man. According to Marxist anthropology, man is an absolutely social creature who, when the material conditions of production are organized in a certain specific way, will automatically behave socially and of his own free will act for the benefit of the whole. The alienation of man resulting from the fact that society is not organized in harmony with his nature, so that he cannot reconcile himself with his surroundings, will cease with the introduction of the socialist society.

To the extent that the Marxist assumptions are altered according to the testimony of experience, we may still justifiably speak of a Marxist theory. Where the Marxist theses are immune to the testimony of experience, the Marxist theory has, however, turned into an ideology. That is just what has happened in the East European countries, where dialectical Marxism has been made an ideology which justifies the acts of the party or the state. Today no non-Marxist ideologist would maintain that a given culture will necessarily develop according to the Marxist model. We have experienced several deviations from this scheme, which ceases, therefore, to be a scientific theory. Nor would anybody nowadays claim that culture is a mere superstructure built on the basis of the material conditions of production. On the contrary, it is a main task of the Frankfurt School, and especially of the Left-Hegelians, to underline the central importance of an ideology for the social and cultural development. If it was not so, theoretical criticism of ideologies would be absurd.

Marxist anthropology, too, is of a rather questionable character. There is no indication that man's mentality is exclusively collective. On the contrary, the observations of the theory of organization as well as ethology and other sciences seem to confirm the opinion always maintained by writers, namely that man is both an individual and a social being and consequently has individual as well as social needs. Man is at the same time an egoist and an altruist. Nor does the alienation seem to be less marked in the East European socialist states than in the West European democracies. Against this the neo-Marxists argue, plausibly enough, that the East European states are not socialist but state-capitalist forms of organization. If man is a collective being by nature, and if it were to be assumed that he

could be happy living in collective units without any other governance or control than his own consciousness of the interests of the collective and the other members, this would probably presuppose groups of the same size as the ones "programmed" in man's biological code, and at any rate not groups of the kind to be found in the modern highly industrialized society. It is, in fact, a characteristic of neo-Marxist theory and practice that these are anarchic in principle, i.e. based upon self-government by small individual groups. It is difficult to see how this can be reconciled with the demands for governing and organization placed by our present society unless one is prepared quite literally to return to nature. According to recent interpretation the young Marx was influenced by the early romantic ideas of Rousseau; this is a paradox, however, since on this point Rousseau is no more to be taken literally than is the mature Marx. Like every romanticist, Rousseau as well as Plato and, in the early 18th century, Vico departed from the dual nature of man, the symbiosis of emotion and reason, of individual and social being. The philosophers in question thought that the organization of society must at any given time be such as to meet all these divergent needs in the best possible way. No more than Rousseau thought it possible to return to the natural state can we today think it possible for the men and women of the highly industrialized modern society to return to anything similar to nature.

If Marxism wants to be taken seriously as a social theory it must take the consequences of testing against reality. If it is not willing to do this it must play the part of an ideology, and in doing so it cannot possibly be called a social theory. Although it must be admitted that what is known as Marxism has elements of theory which are indisputably valid, these elements were not invented by Marx or any other Marxist. The idea of a connection between the material and the ideal culture dates further back. This also applies to the theory of the development of history through different stages and to dialectics as the basis of the method of cultural science. All these characteristics are found as early as the beginning of the 18th century in Giambattista Vico, the Italian theorist of science, in his criticism of the individualistic and rationalistic scientism of Descartes. Vico's approach to the monistic theory of science of Descartes foreshadows the modern dialectic-hermeneutic-pluralistic theory of science, its positivism and its natural-

science philosophy. One might be tempted to use the old locution that what is good in Marxism is not new, and what is new is not good! Most people, even neo-Marxists, do recognize today that the relation between ideal and material culture is a dialectical interaction. Just as it is important for the social sciences to deal with fine arts such as literature, music, and art in order to get a complete picture of the social conditions of a period, so it is, of course, valuable for the humanities and aesthetics to have a thorough knowledge of the cognition and methods of the social sciences in order to get a wide and realistic basis of their scientific cognition. (By the way, this is not meant as an admonition to study Marxism and its history but is intended as an appeal to those working in the humanities to seek closer cooperation with social scientists.)

6. IDEOLOGY AND LEGAL SCIENCE

I shall now proceed to deal with legal science in a narrow sense, i.e. as a designation of the so-called dogmatic legal science, the task of which is a coherent systematic account and interpretation of valid law in, e.g., Denmark. In accordance with this terminology I shall keep legal history, sociology of law, and philosophy of law or jurisprudence outside the concept of legal science, although, of course, they are parts of a more comprehensive concept. If there has been a tendency to equate science, ideology and politics, this has especially been the case with legal science. Several times during recent years we have been presented with statements and alleged proofs that law and politics as well as legal science and politics are the same thing.

In a Marxist interpretation the state is the means used by the ruling class of the bourgeois-capitalist society to oppress the proletariat. The most important instrument of the middle classes consists of legal rules, which they look upon as commands to the people enforceable through coercion. In this respect the Marxist definition of law coincides with the positivist definition personified in Hans Kelsen, the neo-Kantian philosopher and spokesman of the Wiener-Kreis. According to Marxist theory, the legal system, being part of the ideal superstructure, is derived from the existing material basis. The same theory—or rather ideology—asserts that when a society develops into a communist society the oppression will cease, after which

the state will wither away and the instruments of the state, the legal rules, will cease to exist since they will no longer have a function to perform. Until this Utopia is brought into being, legal science must recognize the political function of the legal rules as instruments for the oppression of the working class by the upper middle class. The established legal science deceives the people by presenting an ideal justification of legal decisions, which in reality are political acts. The justification expressed by the judge and the legal scientist is, in reality, only a "façade legitimation", the decision having been made from quite different, hidden considerations of a political character. The jurist's task may quite literally be said to be that of proving that black is white, as one of my colleagues has said in a newspaper article. He is right in saying that the legal system is part of the political system and that the legal judgment does not express a logical conclusion but a decision, but to go on from this to assert that the jurist's role is to make arbitrary decisions as a stage of a political oppression, and afterwards to give them an ideal "façade legitimation", is quite a different matter.

Only when viewed from outside can the legal decision be understood as a more or less arbitrary political act. When estimated from within, the decision is limited to the existing legal sources. As a rule these sources will lead to fairly clear solutions, but in a considerable proportion of cases they will not give an unambiguous answer. It is because of such cases that a legal argumentation technique has developed through generations. This technique may certainly be abused, although in fact its purpose is to limit such abuses by providing a fixed framework for the argumentation, a framework which is generally respected by jurists. It is true, too, that the judge's decision is no logical conclusion which has a given legal rule as its major premise, the facts of the case as its minor premise, and the judgment as its conclusion. This dilemma is due to a purely theoretical problem, which I cannot go into here, regarding the relation between language and reality. However, the dilemma is connected with the fact that a given situation has to be qualified in relation to a linguistic description in the legal norm. In at least three respects an estimate is involved in the legal decision: (1) it will be possible in most cases to apply several different rules leading to widely different results; (2) when interpreting the possible relevant rules, attention must be paid not only to the lexical meaning of the words of the

statute but also to the systematic grouping of the single rules in the statute and the system of laws, to the information given in the *travaux préparatoires* as to the purpose of the statute and the rule, and to considerations regarding the means of achieving the objects declared or implied; (3) when selecting the facts which are to be considered in the decision, estimates will be made which depend on the same considerations regarding the object of the rules and the means of achieving these objects checked with general considerations regarding the consequences of the decision and regarding legal and moral ideas and principles.

Only analytically, however, will it be possible to distinguish between these different aspects of the estimate, which will in practice be one process of thought moving from facts to law and vice versa, limiting step by step the possible choices and in the end leading to a decision. To many people this process looks like a purely intuitive activity. Indeed, many highly esteemed judges actually describe their own decisions in this way. Against this it may be remarked that the main reason why these judges have this conception is probably the indoctrination to which every judge has been subjected in the long process of learning and acquiring legal norms and legal methods. The legal judgment implies decisions, conclusions, estimates, and logic. The importance of formal logic is its control function. Logic prevents the discussion from degenerating. It must be emphasized that the estimates and decisions are not irrational. It is true that the judge must make a choice, but a choice is not irrational simply because it is a choice and not the result of a logical process. The choice is directed by the legal ideas which lie behind and govern the legal system. Besides the rules or principles of legal argumentation used by the jurist in his work with and his cognition of the legal system, there are the material legal principles or ideas which are not given with the laws. The function of the substantive legal principles is partly that of being the point of departure of the legal argumentation, thereby ensuring unity and consistency in the application of the legal rules, and partly that of deciding the extent of the rules. None of these principles indicates one specific solution to the jurist. They only mark out the framework of the solution and depend, as mentioned, on the view and approval of the period in question. On the application of the law the judge must answer two questions: (1) Is the rule applicable?

(2) Must the rule be applied? To answer the first question, he may find guidance in the principles mentioned. In deciding on the second question, he must pay pragmatic consideration to the effects of the decision, teleological consideration to the desirability of the result, and systematic consideration to the adaptability of the decision to the legal system.

It is obvious that the legal ideas—the principle of formal justice saying that equal cases must be treated equally, as well as the substantive legal principles—besides being part of the political and ideological system, which is a commonplace, are also connected with the fundamental conditions of human coexistence. I am referring to the basic substantive ideas, the ideas of reciprocity and retribution, of reward and punishment. Next we have the well-known commandments: Thou shalt not lie, steal, kill. Without mutual reliance and respect for the property and integrity of one's fellows, no group community can exist. In so far as norms take the place of instincts as social control and man creates a cultural society, the basic ideas mentioned are necessary and can consequently be characterized as natural law or primitive law. The study of the various social and cultural sciences indicates that these norms are the minimum contents of all known legal systems. Besides these basic formal and substantive legal ideas, western civilization has developed a series of legal ideas lying behind and directing the legal argumentation in different spheres. From criminal law we may state the principle *in dubio pro reo*, i.e. the suspect is innocent until the contrary has been proved. The same idea of the legal protection of the individual is implied by the maxim *nulla poena sine lege*, i.e. nobody can be punished for an action which has not expressly been made a criminal offence by a legal provision. From the law of procedure we know the principle *audiatur et altera pars*, i.e. nobody can be sentenced without having had a chance to give evidence during the trial. The principle of public administration of justice is regarded as a necessary correlate to freedom of speech and freedom of the press, private autonomy is regarded as the basis of the law of property of a liberal society, and the rule of law is regarded as the legal guarantee of the citizens' position in relation to the state. In addition to this, we have the so-called civic rights, which originally were political-ideological programmes but now are fundamental legal rules in most western countries' constitutions.

Out of this, obviously, there results an ideological pattern based on the view of man which is commonly held in liberal societies and which accords an independent importance to the individual. The limitations upon freedom of action made by the modern welfare state in the interests of the whole imply the social-liberal view of humanity which is based on the assumption that man is an individual as well as a social being. There is no question, therefore, whether the ideology, and with it the legal ideas, lie behind the legal system, deciding its contents and the direction of the argumentation which will be applied by a given jurist acting within the framework of the system. As a matter of fact there are several prominent legal writers in Denmark, among others Ross and Illum, who regard the legal rules as being expressive of the ideology prevailing in the society in question. It does not follow from this, however, that law is identical with ideology or that law is politics. On the contrary, the jurist acting within the framework of the system is reduced to complying with certain rules of the game, the legal rules, and the accepted legal argumentation, and it is precisely in this way that society is secured against political or ideological infringements. The superior legal idea is indeed the rule of law which contains the guarantee of the individuals' security from arbitrary infringements. When the ideology forming the basis of the social order is pluralistic, there will be an immanent control function in the ideology. If it is a totalitarian ideology, on the other hand, an immanent control function will be lacking. This very factor is of decisive importance for the ideology-critical philosophy. It is the very possibility and the utilization of the possibility of uncovering and criticizing the ideological assumptions of law and science—including of course, legal science—that determine the dialectical process which is the prerequisite for a mutual adaptation of individual and society. Such adaptation is, in the last analysis, the moral demand made on society, law and science by ideology-criticism. From this, however, one cannot draw the conclusion that legal science must be "critical science" according to the neo-Marxist interpretation of law. Since, according to this view, law is in principle a means of oppression, the means by which today the upper middle class oppresses the working class, the task of legal science must be that of fighting the present legal system and altering it in what one believes to be the interests of the working class. It is evident that critical legal science in this

sense has nothing to do with science but is instead legislative policy or simply politics. Its purpose is not to describe and interpret the legal rules from the viewpoint of the aims of the prevailing political system and to adapt the latter to the development of the social conditions. Only when one assumes the necessity of an historical process and a specific anthropology can such an activity be called science; and even if these basic assumptions were true there could probably not be any talk of legal science, since the legal rules, as mentioned, must be regarded as an integral part of the prevailing political system. It is no use expecting a carpenter to be an architect, or a piano player to be a composer. No more can a legal technician or a legal scientist be expected to be a politician.

7. CONCLUSION

I accept to a large extent the demand of the ideology-critical school that we must be made conscious of the ideological and other value-coloured prerequisites of human activity in general, especially of science and legal science. On the other hand, I cannot accept the neo-Marxist theory of the identity of politics and science and of law and politics. I also accept in principle the assumption that a specific anthropology must be the point of departure of any science. How would psychiatry, for instance, fare without any preconceived opinions of mental health and so of the nature of man? On the other hand, one has to be careful when constructing one's picture of man. When Habermas, and to a certain extent Popper, consider themselves able to make logical conclusions regarding the nature of man, moving from the assumption that thought and its dialectical way of functioning are essential qualities in man to the assumption that man is a dialectic-critical and rational being, this seems to be a questionable argument which is, in fact, widely contradicted by experience. The neo-Marxist picture of man as a collective-minded being who will expand in full freedom without any need of any kind of organization and control in a communist society seems to be a romantic vision rather than a scientific theory. It may be unfair to romanticism, however, to call the Marxist anthropology romanticist, since romanticism in all its varieties has at all times emphasized

that mankind is a symbiosis of individual and society and of feeling and intellect. It will probably be necessary to operate with an anthropology when choosing the direction of one's scientific activity, but it will be reasonable, nevertheless, to beware of the risk that such a necessary and humane theory, which is constantly corrected by experience and practice, might develop into a tyrannical ideology in which man will be caught as in a bed of Procrustes.

This article is derived from a lecture based upon earlier works by the author:

1. *Law and Society*, Aarhus 1971.
2. "Argumentation and Decision", in *Festskrift til Alf Ross*, Copenhagen 1969, pp. 261 ff.
3. "Typologie und Realismus", *Nachrichten der Akademie der Wissenschaften in Göttingen*, Göttingen 1971.
4. "Norm und Wirklichkeit", *Rechtstheorie* 1971, pp. 1 ff.
5. *Vertrag und Recht*, Copenhagen 1968, pp. 111 ff.

The author discusses, *inter alia*, the following works:

1. Ernst Topitsch (ed.), *Logik der Sozialwissenschaften*, Cologne and Berlin 1966.
2. G. Radnitzky, *Contemporary Schools of Metascience*, 2nd ed. Gothenburg 1970.
3. H. G. Gadamer, *Wahrheit und Methode*, 2nd ed. Tübingen 1965.
4. H. G. Gadamer, "Rhetorik, Hermeneutik, Ideologiekritik", in *Kleine Schriften I*, Tübingen 1967, pp. 113 ff.
5. "Hermeneutik und Dialektik", in *Festschrift für H. G. Gadamer*, Tübingen 1970.
6. Jürgen Habermas, *Erkenntnis und Interesse*, Frankfurt a. M. 1968.
7. Jürgen Habermas, "Zur Logik der Sozialwissenschaften", in *Philosophischer Rundschau*, Beiheft 5, Tübingen 1957, ch. 3.