

Marxism and Determinism

"The Moving Finger Writes; and, having writ,
Moves on; nor all thy Piety nor Wit Shall lure it
back to cancel half a Line, Nor all thy Tears wash
out a Word of it." (Omar Khayyam)

IN THE May 1990 number of *New Interventions* I contributed an article "Historical Determinism and the Role of the Individual" dealing with the dilemma that faces socialists if they interpret Marxist historical materialism as being a determinist doctrine. In part III of his article "Towards the Twenty First Century" in the November 1990 issue (reprinted in the October 1992 issue) Ken took me to task for misunderstanding Marx. "The Marxism of Marx", said Ken, "is not and never was a historical determinist doctrine." Then Chris Bailey berated Ken for failing to correctly refute my version of historical materialism. Chris wrote: "As Ken says, Harry's article sees Marxism as a historical determinist doctrine.... Instead of showing the false premise concerning Marxism that Harry started with, Ken makes matters worse. Not only is history imbued with purposeful activity but, it seems, apple seeds too.... It seems to me, however, that having failed to correctly refute Harry's version of historical materialism, Ken himself still remains trapped within it. If apple seeds and history are seen as possessing purpose and aims, then the distinct and unique (in our corner of the universe) feature of human beings is lost." (*New Interventions*, April 1993.) Chris also dealt with this question in his article "The Laws of History" in the July 1992 issue.

It seems to me that three distinct but related questions are involved: (1) Was Marx determinist or not? (2) Whether Marx was or was not determinist, should we be? (3) Does it matter? And if so, how? What I mean is – does how one answers question (2) affect one's actions, and if so how?

Was Marx Determinist?

In the light of Ken's and Chris's comments I no longer wish to argue categorically that Marxism is determinist. I now consider that there are both determinist and voluntarist strands in the writings of Marx and Engels, and that how much weight is given to each depends on how we approach the question and in which context. It is

a fact that they have been interpreted both in a determinist and in a voluntarist fashion by people who consider themselves Marxist.

First, the determinist strand. Marx's and Engels' criticisms of the utopian socialists stressed the scientific and objective content of their historical materialism in contrast to the subjectivism of the utopians. (The very title of the pamphlet "*Socialism – Scientific and Utopian*" emphasises that). Communism would come about, not because of the subjective wishes of well intentioned individuals like St Simon, Fourier, *et al*, but as a result of the objective laws governing the evolution of society.

As Chris acknowledges: "It is surely impossible to deny that human social history is also subject to laws of development. Humanity does not reside on Mount Olympus. It lives within the world of nature and is part of this world. Marx and Engels sought to discover the laws of social history".

(Chris subsequently argues that this does not imply that it is therefore possible to predict accurately the course that history will take. My answer is – that inability to predict events does not logically entail that these events are not determined. The fact that we cannot predict the weather does not entail that it is not determined. Prediction and determination are quite different things.)

My point is that the emphasis placed by Marx and Engels on the scientific nature of their analysis of society and its development, the claim to have uncovered the "laws of motion" of that society, the argument that the material base determines the super-structure of society (including ideology), that "being determines consciousness" and their attacks on utopianism, all imply a determinist view of society. This implication is reinforced – if not made explicit – by classical Marxists such as Kautsky and Plekhanov. According to the latter, as I pointed out in my original article, the role of the individual, his wishes and actions, i.e. "voluntarism", is insignificant in relation to the objective factors which determine the evolution of society.

According to this view, the French revolution, the two world wars, the October Revolution, the British miners' strike of 1984-5 and their outcomes were not determined by the actions and wishes of individuals but by objective circumstances.

Kaiser Wilhelm, the Tsar, the British and French politicians, Lenin and Trotsky, Arthur Scargill and Maggie Thatcher, and the masses too – the sans-culottes, the soldiers, the Putilov workers, the miners – were merely the agents of history, the actors playing their part. The script had already been written by the hand of history. It merely required the casting director to allot the most suitable actors and actresses to each role.

Chris Bailey reminds us that Marx also said: “*History does nothing*, it ‘does *not* possess immense riches’, it ‘does *not* fight battles’. It is *men*, real, living men, who do all this, who possess things and fight battles. It is not ‘history’ which uses men as a means of achieving – as if it were an individual person – *its* own ends. History is *nothing* but the activity of men in pursuit of their ends.”

I agree! But, again, the “determinist” interpreter of Marx can point out that Marx also argues that though it is men who “fight the battles”, their consciousness, their wills and their actions are themselves determined by their material conditions, by their position in society and by the “laws of motion” of that society. What other interpretation can be put on the following passage from *The Holy Family* that I have already quoted?

“It is not a question of what this or that proletarian or even the whole proletarian movement momentarily imagines to be the aim. It is a question what the proletariat is and what it consequently is historically compelled to do. Its aim and its historical action is prescribed irrevocably and obviously in its own situation *in life as well as in the entire organisation of society*” (my emphasis – HR).

In case Chris or Ken are about to reach for another quotation from Marx with which to clobber me, let me hasten to say that I accept that other passages, and, in fact, the writings of Marx and Engels taken as a whole, are open to different interpretations. We could debate what Marx really meant for ever. But the more important questions at present are questions 2 and 3 – that is, what do WE, Ken, Chris, myself and others, think (whatever Marx and Engels said, and irrespective of whether we agree with them or not). And what practical conclusions, as far as our own actions are concerned, do we draw from our answer to question 2.

Determinism in the Material World

First we need to examine whether the material universe (in which human society is contained) is itself governed by determinist laws. And what do we mean when we say an event is determined?

Determinist or fatalistic views have been held since the dawn of civilisation. This determinism of the universe was, in the main, at first attributed to external, supernatural agencies, the gods – and, later, with the rise of monotheist religions, to one all-powerful God who determined the course of

events and the fate of men. Determinism was imposed on the world from the outside. Then, the development of the physical sciences from the 16th Century onwards provided a scientific underpinning and justification for determinist theories. First there were the discoveries of Galileo and Newton that the motions of material bodies were determined by determinate laws, the laws of gravity and motion, that were assumed to be immutable and universally applicable. This led the French mathematician and astronomer, Laplace, to declare:

“We ought then to regard the present state of the universe as the effect of its antecedent state and the cause of the state that is to follow. An intelligence knowing, at any given instant of time, all things of which the universe consists, would be able to comprehend the actions of the largest bodies of the world and those of the lightest atoms in one single formula, provided his intellect were sufficiently powerful to subject all data to analysis; to him, nothing would be uncertain both past and future would be present to his eyes.” (Pierre de Laplace, *Analytic Theory of Probability*, Paris, 1820.)

Subsequent scientific discoveries, deepening our knowledge of the atomic structure of matter, reinforced this view. It was now discovered that the way chemical elements combined to form compounds was determined by their internal atomic structure. The proportions in which atoms of one element combined with atoms of another element to form a compound (their valencies) was found to be determined by the number of electrons in the outer shells of each atom which could be shared or exchanged with other atoms to provide the most stable electronic configuration. Mendeleev (1834-1907) discovered that there was a periodicity in the chemical properties of the elements in relation to their atomic masses. He devised a Periodic Table of all the elements that were known at the time, arranged in order of atomic masses. There were numerous gaps in his table, which were later filled by the discovery of new elements. It was found that the chemical properties of these newly discovered elements were exactly as they could have been predicted from their atomic masses. This and other discoveries provided the basis for a materialist reductionist view of the universe, the belief that all the properties of matter could be explained in terms of their atomic structure and of events at the atomic level. And since the laws governing the behaviour of atoms and all material bodies were determinate laws, the whole universe, at least its inanimate part, was completely determined by these laws.

The subsequent discoveries, in the 19th Century, that the universe was not composed only of material bodies but also contained electric and magnetic forces, did not overthrow the determinist view. The new entities were incorporated into a, still determinist but, now slightly more complex

network of causes and effects.

"Maxwell's equations describe the structure of the electromagnetic field. All space is the scene of these laws and not, as for mechanical laws, only points in which matter or charges are present.

"We remember how it was in mechanics. By knowing the position and velocity of a particle at one single instant, by knowing the acting forces, the whole future path of the particle could be foreseen. In Maxwell's theory, if we know the field at one instant only, we can deduce from the equations of the theory how the whole field will change in space and time. Maxwell's equations enable us to follow the history of the field, just as the mechanical equations enabled us to follow the history of material particles." (*The Evolution of Physics*, by Albert Einstein and Leopold Infeld, Cambridge University Press, 1961, p.146.)

Einstein's theories of relativity abolished the separation between the observed event and the observer and united them into a dialectical whole. But Einstein remained a determinist.

The developments in quantum physics during the first half of the 20th century led many physicists to abandon their previous determinism. In 1927 Heisenberg published a paper in which he pointed out the impossibility of determining precisely and simultaneously the position and momentum of a quantum because the very act of observing it disturbed it. Moreover he went on to express this indeterminacy quantitatively in his *Uncertainty Relations*. Though it was still possible to assume that the unobserved and undisturbed particle still had a definite position and momentum, Heisenberg adopted the view that speculations about the existence of a true "causal" universe, concealed behind the measurements, were futile. Neils Bohr, as a Positivist in the tradition of Ernst Mach, took a similar view. They and many other physicists interpreted the indeterminist features of the quantum theory as representing irreducible lawlessness at the very base of the material world.

But other scientists, including Einstein, questioned whether the quantum theory has finally put an end to determinacy. They argued that behind the indeterminacy of measurements at the quantum level there still existed a concealed causal world; and that further research should be aimed at discovering the "hidden variables" which could circumvent the *Uncertainty Relations* and reveal determinist laws operating at a deeper level. Louis de Broglie wrote:

"At the level now reached by research in microphysics it is certain that the methods of measurement do not allow us to determine simultaneously all the magnitudes which would be necessary to obtain a picture of the classical type of corpuscles (this can be deduced from Heisenberg's uncertainty principle), and that the perturbations introduced by the measurement,

which are impossible to eliminate, prevent us in general from predicting precisely the result which it will produce and allow only statistical predictions. The construction of purely probabilistic formulae that all theoreticians use to day was thus completely justified. However, the majority of them, often under the influence of preconceived ideas derived from positivist doctrine, have thought that they could go further and assert that the uncertain and incomplete character of the knowledge that experiment at its present stage gives us about what really happens in microphysics is the result of a real indeterminacy of the physical states and their evolution. Such an extrapolation does not appear in any way to be justified. *It is possible that looking into the future to a deeper level of physical reality we will be able to interpret the laws of probability and quantum physics as being the statistical results of the development of **completely determined** values of variables which are at present hidden from us.*" (Foreword to *Causality and Chance in Modern Physics*, by David Bohm, Routledge & Kegan Paul, London – my emphases – HR.)

In a later work Bohm detailed experiments designed to probe the sub-quantum level and concluded: "...we have carried the theory far enough to show that we can explain the essential features of the quantum mechanics in terms of a sub-quantum mechanical level involving hidden variables." (*Wholeness and the Implicate Order*, Routledge & Kegan Paul, ARK Edition, London, p.109.)

In 1944 Einstein wrote, in a letter to Max Born: "You believe in the God who plays dice, and I in complete law and order in a world which objectively exists, and which I, in a wildly speculative way, am trying to capture. I firmly believe, but I hope that someone will discover a more realistic way, or rather a more tangible basis than it has been my lot to find. Even the great initial success of the quantum theory does not make me believe in the fundamental dice-game.... No doubt the day will come when we will see whose instinctive attitude was the correct one." (*The Born-Einstein Letters*, New York, Walter and Co, and London, Macmillan, 1971, p.149.)

But even if Einstein, de Broglie and Bohm are wrong and there *is* an irreducible lawlessness at the microscopic sub-atomic level, it still seems as if this indeterminacy does not break through to the macroscopic level of phenomena *that we experience directly*. This is due to the fact that the very randomness of the behaviour of individual particles translates via the statistical mathematical laws of probability into the predictable and determinate behaviour of *large aggregates*. An example of this is the behaviour of gases. The kinetic theory of gases tells us that the pressure and the temperature of gases is the result of the random motion of millions of molecules. Although

we are unable to determine the actual position and momentum of any individual molecule, we know that the very nature of the randomness of motion of a *large aggregate* of molecules (expressed in the equations of statistical probabilities) results in uniform distribution of molecules and kinetic energy over the whole space occupied by the gas. The effect of this is that at the *macroscopic level* gases behave according to deterministic laws. These are Charles' and Boyle's laws of gases which state that for a given volume the pressure will vary proportionally with the temperature, and that at a constant temperature the pressure will vary inversely with the volume. And these determinist effects are independent of the actual positions and momenta of the individual molecules; in fact the very *lawlessness and indeterminacy of their motions* is a guarantee that large aggregates of them will behave in a deterministic way. The same relationship of randomness at the individual level and determinate effects at the level of large aggregates allows actuaries to calculate with reasonable accuracy the average life expectations of categories of individuals in order to fix insurance premiums, and traffic experts to predict with reasonable accuracy the flow of traffic and pattern of accidents at different times of the day without having to look at each individual case.

(Nevertheless each individual accident is also determined by a whole combination of causes. If Joe Bloggs had not stopped on the way to buy a paper he would have arrived at a blind corner five minutes earlier and thus not been hit by the car driven by Andy Jones. And if Andy had not had a row with his wife before leaving the house he would have driven more carefully. Similarly, if we had the techniques we might even be able to plot accurately the path of each individual molecule in a gas – but the point is that we don't need to do this in order to predict the behaviour of the gas at the macroscopic level).

Classical Newtonian physics assumed a static universe that existed for all time and was governed by immutable and unchangeable laws of nature. Recent developments in cosmology indicate that the universe itself is evolving. It had a beginning in the "big bang", is at present in an expanding phase, and may eventually collapse back into itself. Along with this evolution in time the laws which apply at different stages of the universe may themselves be changing (for example in the extremely hot and condensed state of matter during the first nanosecond of the big bang the laws of gravity and motion that apply today may not have applied then, if only because there were no discrete particles on which these laws could operate). So along with the universe the laws that govern it are in a process of evolution. But there is no reason why the state of the universe AND ITS LAWS could not be determined by the immediate previous state of the universe and its

laws. In other words the laws themselves could change in accordance with laws governing laws.

In an infinite universe, expanding in space and time, it is impossible for mankind to ever acquire total and complete knowledge. We can only arrive at approximate and partial knowledge. Events we cannot explain seem random until we discover some of the laws governing them. The notion of randomness, like the notion of God, is only a euphemism for the incompleteness of our knowledge – for our ignorance.

All the above considerations incline me to accept, as a valid hypothesis, that, at least the physical world which we presently inhabit, is ruled by determinism.

Are Human Actions Determined?

If we accept that the inanimate world is wholly determined, does it follow that human actions are determined?

The most common argument for this is a reductionist one that goes like this. All happenings at the macro level are determined by events at the next lowest level right down to the basic atomic and sub atomic level. (It is assumed, as explained above, that indeterminacy at the quantum level translates into determinacy at the level of large aggregates of particles). Similarly, since human beings are composed of matter, and since consciousness is the outcome of electrochemical events in the brain and nervous system, and these physical events are determined, human consciousness, choices and actions, are determined. I may have the illusion that I am making a free choice, but in reality the choice I make is determined by the physical state of my brain, which in turn is determined by its immediately preceding state ... and so on. (And the very fact that I think this is, itself, determined by the physical events in my brain ...)

For some time I was impressed by this argument. But eventually I rejected the crude reductionism on which it is based. While it is true that consciousness is dependent on a functioning material body, *consciousness and thought cannot be reduced to merely physical effects, and cannot be described in purely physical terms*. They are not the same thing. There *is* a relationship between physical events and mental events but it is not a reductionist one, nor is it necessarily a rigid one-to-one correspondence.

In order to analyse this relationship in more depth, it is necessary, first, to say something about the hierarchical organisation of the universe and the different laws and types of analysis appropriate to each level in this hierarchy. If, for example, we start at the level of the human individual and look downwards and inwards, we see that this individual is an assemblage of parts; skeletal system, nervous system, respiratory system and so on; in turn each system is composed of organs,

which are composed of tissue, bone etc, which in turn are made up of cells composed of molecules, which are made up of atoms ... right down to the level of elementary particles. The individual human organism is a functioning assemblage of parts and sub-parts. But this individual is more than just the sum of these parts; he/she is a functioning entity in his/her own right. Looking upwards and outwards, the individual is also part of a wider whole, of a family, a class, a nation, of human society. In turn that society is part of the wider universe. So each entity is both a whole *and* a part. But, as Koestler pointed out:

“A ‘part’, as we generally use the word, means something fragmentary and incomplete, which by itself would have no legitimate existence. On the other hand, a ‘whole’ is considered as something complete in itself which needs no further explanation. But ‘wholes’ and ‘parts’ in this absolute sense just do not exist anywhere, either in the domain of living organisms or of social organisations. What we find are intermediary structures on a series of levels in an ascending order of complexity: sub-wholes which display, according to the way you look at them, some of the characteristics commonly attributed to wholes and some of the characteristics commonly attributed to parts. We have seen the impossibility of the task of chopping up speech into elementary atoms or units, either on the phonetic or on the syntactic level. Phonemes, words, phrases, are wholes in their own rights, but parts of a larger unit; so are cells, tissues, organs; families, clans, tribes. The members of a hierarchy, like the Roman god Janus, all have two faces looking in opposite directions: the face turned towards the subordinate levels is that of a self-contained whole; the face turned upward towards the apex, that of a dependent part.... This ‘Janus effect’ is a fundamental characteristic of sub-wholes in all types of hierarchies.” (A. Koestler, *The Ghost in the Machine*, Picador, London 1967, p.48).

Koestler called these Janus-faced entities “holons” (from the Greek holos = whole, with the suffix on which, as in proton or neutron, suggests a particle or part).

Moreover the laws governing the behaviour and interaction of entities at each level are particular to that level. For example my typing this sentence at the keyboard involves physical movements of my fingers, activated by impulses travelling along the motor nerves attached to my arm and finger muscles and so on. These are electro-chemical and biological events determined by causal laws operating at the appropriate level. The causal sequence, stimulus – nerve impulse – muscle contraction, is determined by the causal laws operating at the biological level. But this does not explain why the result is a grammatically correct sentence. The rules of grammar and language cannot be described in terms appropriate

to the physical functioning of the nervous system. Nor are the laws governing language adequate to explain why I am writing this article. Nor can the contents and arguments of the article be described in terms appropriate to the biological level. For this one must seek explanations and causal networks at a different level.

This is why crude reductionist determinism is inadequate. The actions and motives, the choices made by individuals that lead to their actions and interactions with each other within society cannot be reduced to the physical and biochemical events within their bodies and nervous systems. The thought processes and actions of conscious individuals are governed by causal networks appropriate to that level. Similarly the behaviour of aggregates of individuals in social groupings, families crowds, classes, etc is *determined by* other sets of causal laws operating at the level of human society.

It goes without saying that just as there is a sequence of cause and effect *within* each level, there is also an interaction and relationship between events and states at the different levels. It is obvious that human beings cannot have motives and wishes, or interact with each other unless the biological functioning of their bodies makes them viable organisms; in turn their biological functions are dependent on the chemical processes in their cells and tissue, which are in turn dependent on their molecular and atomic structures. But this does not imply that a mental state or event *is nothing but* a physical state or set of events in the brain. My toothache or state of mind is as real as the biochemical processes that underlie them. The physical events and the corresponding sensations are both real and distinct though related.

The question remains whether there is a causal relationship between the two levels. Does one particular pattern of neuronal activity in the brain cause me to think “two plus two = four”, and another pattern cause the thought “five plus three = eight”? So far scientific research has not come up with the answer. It is possible that rather than a one-to-one correspondence between physical and mental events there may be many-to-one, one-to-many and many-to-many correspondences. We know that two computers can be designed to process the same programmes but constructed of different materials and using different physical processes. One may read its input from punched paper tape and carry out its calculations using light beams; the other may use purely electronic switching, but both would be processing the same programme. The same software and programming can be processed via quite differently designed computers, made of different materials.

Steven Rose, Professor of Biology at the Open University and director of its Brain Research Group, who has written much on the mind-body

relationship from a Marxist point of view, prefers to think of the relationship between the levels as not a causal but a mapping one:

"In one sense the mapping that I am describing is isomorphic, although not necessarily one-to-one (as opposed to one-to-many or many-to-many), and it is no more a causal one in its relationship than is the relationship between, say English and French. The two languages can be translated and are generally isomorphous in so far as they are descriptions of the same unitary universe, but it is not possible to claim a reductive primacy for one language over the other.... While claiming that mind and brain processes are identical, this dialectical identity theory insists on the continued legitimacy of mind language. It resists locating ultimate 'cause' in a molecular domain while insisting that the molecular and cellular knowledge is necessary for a full understanding of the material reality of both mind and brain. The tasks of a 'brain and behaviour science', attempting to make a complete dialectical description of the organism and its history and relationships, then become not those of the search for trans-hierarchical causes, but for translations between biochemical events and behavioural ones. Will such a science of translation be liberatory? There is no absolute answer to this; like reductionist science, indeed, like all phenomena, it will bear its own contradictions within it. All I would maintain is that at this moment in history it provides us with a better key to understanding the world than does reductionism; and understanding is, as we know, one part of changing the world." (*Molecules and Minds*, Steven Rose, Open University Press, Milton Keynes, 1987, pp.100-102.)

While I accept that Steven Rose's dialectical identity theory and the concept of mapping and translation between events at different levels is a useful way of analysing the relationship between physical and mental events, it still does not quite resolve the question I asked – are human thoughts and actions completely determined by the physical events in the brain and body? I don't think this question can be answered by purely philosophic ontological arguments but by examining the empirical evidence. Much research has been done by neurologists, psychologists and other scientists but no clear mapping of the relation between the pattern of neuronal activity in the brain and mental states has emerged. However it is evident that there must *some* relationship and some mutual *interaction* between the two. We have ample evidence that drugs affect moods and perceptions and that they do this via the alteration of the chemical states in the brain and nervous system. There is also evidence that mental states affect physical states; anxiety, fear and other emotions alter hormonal excretions, the pulse rate etc. In other words, it is likely that as well as a mapping

and translation relationship there is a causal relationship between events at the different levels. But it is more likely to be a many-to-many rather than a one-to-one relationship. And, as I have already argued, it is certainly not a reductionist one.

Different hierarchies of entities do not exist in isolation. They are entwined and interlocked with other hierarchies. As Koestler explains: "Hierarchies can be regarded as 'vertically' arborising structures whose branches interlock with those of other hierarchies at a multiplicity of levels and form 'horizontal' networks: arborisation and reticulation are complementary principles in the architecture of organisms and societies." (Op. cit., p.345.)

As an example of the intricate network of interlocked hierarchies and contexts each individual is simultaneously a member of a social class, of a nation, a religion or an ethnic group. He or she is situated in a particular place and a specific historical juncture. History is just not one of class struggle only, but of class struggle intertwined with struggles between nations and ethnic and religious groups. I defy anyone to explain the current events in the former Yugoslavia in purely class terms. When Serb, Croat and Bosnian, Catholic, Orthodox, and Muslim workers who for years lived and worked side by side are massacring each other is this the struggle of class against class? Which class is fighting which? A much more complex explanation is required which involves the interactions at all sorts of levels and in particular historical contexts of interlocking networks of causality.

With such a framework in mind we can now conceive of the actions of individuals as being determined by a whole complex network of causal relations working at different levels and in particular historical conjunctures. And no historical conjuncture can ever be repeated exactly. (As one ancient Greek philosopher put it – you cannot bathe twice in the same river.)

Similarly the behaviour of groups and classes of individuals, i.e. of social formations, the evolution of human societies, can be conceived as determined by this complex web of causal networks. This is still determinism but not crude reductionist determinism. In this context we must reject the crude reductionist view adopted, by many "Marxists", that the political and ideological superstructures of society are completely determined by the material economic base. "Base" and "superstructures" mutually act on each other and must be viewed as a whole.

So I am able to reassure Chris Bailey that I do not (however one interprets Marx) see history as taking place behind the backs of conscious human beings. The conscious actions of human beings do change society and make history. But these human thoughts and actions are themselves

determined – not only by the objective material conditions, but also by their previous historical experiences. So I do not fundamentally disagree with Chris when he says:

“But, surely, the transformation of the proletariat from a class-in-itself into a class-for-itself is a development of consciousness. Unity of the working class does not arise from crises in capitalism, but from the level of consciousness of the class. If the working class is dominated by nationalism, religious fundamentalism etc, then a crisis of capitalism will not bring about unity of the class. On the contrary, it will only exacerbate the disunity.” (*New Interventions*, April 1993, p.12.)

Chris then adds that “the working class is dominated by bourgeois ideology because of the crisis of socialist theory”. True! I would only add that the fact that socialist theory is in crisis is itself determined by the whole network of antecedent economic, political and ideological causes!

Does it Matter?

Let me return, for a moment, to the relation between physical events and mental events. I said earlier that science has not yet been able to map out a one-to-one correspondence between the two, and that it was probably a many-to-many relationship. In primitive organisms most actions are instinctive or reflex actions, wholly determined by the external stimuli received via the organism's sense organs. Many human actions are also of this type; “knee-jerk” reactions such as blinking, jumping at a sudden noise or when one sits on a drawing pin. But over centuries of evolution the human brain has evolved to the point that, at a higher level, the level of conscious choices and decisions, the individual has the capacity to consciously make choices.

This leaves open the possibility that, at the level of the individual, free will operates. But it immediately needs to be added that if such free will exists, it is only operative within limits and constraints, not only the obvious ones imposed on us by the laws of physics and our bodily chemistry, but those imposed by the combination of our individual genes, upbringing, personal experiences and social relations. To extend the argument; if everything was known about an individual's genetic make up, whole life experiences and, therefore, character and dispositions in depth, it would be possible to predict that individual's actions in any situation that was also known accurately.

But the whole point is that nobody can possibly have that total knowledge. Even if I firmly believe that not only my actions but even what I am thinking about at the moment and what I will decide in the next second is completely predetermined *I do not know what my next thought, choice or action is determined to be*. In order to know this, I first have to think the thought, make the

choice and carry out the action. In that sense I have to act in exactly the same way as I would if I believed in free will. This is the paradox. I may believe that “objectively” my will is determined but “subjectively” I have to exercise my will as if it were free. Furthermore, as a living conscious human being I am imbued with certain drives and desires; and I also know that my choices and actions are necessary links in the causal chain that may lead to the realisation of my aims.

That is why I asked, at the beginning of this article “Does it matter whether one is a determinist or not?”. In this context, it seems that it does not.

But this is so only to the extent that I believe my actions make any difference. They certainly do in the narrow circle of my family, friends and immediate surroundings. Do they in the wider context of political activity? It is here that our views, not about determinism in general, but about historical determinism and the role of the individual in history, do influence our actions. They certainly influenced me in my decision to leave the Socialist Labour League and to cease political activity in 1960. I had, for some time, become increasingly aware of the discrepancy between reality and the grandiose perspectives held by we Trotskyists of capitalist collapse and mass struggles in which our movement would play a crucial role. We were getting nowhere.

I had never enjoyed political activity in itself but seen it as a duty. By then I had, for 25 years, devoted all my energies, subordinated my personal life, imposed sacrifices on my family. So far to little effect. I felt like a convict chained to a treadmill and quailed at the prospect of a further lifetime of fruitless activity. But I had held on out of a sense of duty, afraid my defection would weaken the movement although, in my guts, I saw no prospect of victory. It was in that frame of mind that I happened to pick up and re-read Plekhanov's *Role of the Individual in History* that I had read many years ago without ingesting its implications.

Now they struck me forcibly. If, according to Marx and Plekhanov, the outcome of events was determined by large scale objective forces – the objective laws of history – in which even the actions of such figures as Robespierre and Napoleon made little difference to the eventual outcome of the French Revolution, what effect could my own puny efforts have on the outcome, whether it be victory or defeat, of the coming social revolution? Why condemn my family and myself to further years of ineffective sacrifices and hardships? So I cut my chains and stepped off the treadmill; with no feeling of guilt. The cynic might say that Plekhanov merely provided me with a handy justification for my decision. But nevertheless the argument has to be dealt with; the determinist interpretation of historical materialism shown to be correct or incorrect.

I have tried to address this issue in this and my previous article. It will be evident that I have somewhat modified my previous arguments. The writings of Marx and Engels incorporate both “determinist” and “voluntarist” strands. But, as I said, earlier, what is more important is what WE think today.

I mentioned the paradox that even a firm “determinist” has to act as if his actions and, therefore the events they effect, were not determined. The paradox is resolved if one sees that the “determinist” and the “voluntarist” view are both valid – depending on the context involved. Let Isaac Deutscher have the last word on this. I quote from his introduction to *Stalin*:

“Some critics have remarked on my ‘cool and impersonal’ approach to Stalin. Yet the work on this book was to me a deeply personal experience I had belonged to those whom Stalin had cruelly defeated; and one of the questions I had to ask myself was why he had succeeded. To answer this question the partisan had to turn into an historian, to examine dispassionately causes and effects, to view open-mindedly the adversary’s motives, and to see and admit the adversary’s strength where strength there was. The political fighter cannot allow himself to be too severely restricted by a *deterministic* view of the situation in which he acts, if only because some of the elements of that situation, and some of the chances, are *as yet unknown and even undetermined*; and because he can never be quite sure what will be the impact of his own action on any given situation. The historian, on the other hand, *cannot help being a determinist*, or behaving as one if he is not: he has not done his job fully unless he has shown causes and effects so closely and naturally

interwoven in the texture of events that no gap is left, unless, that is, he has demonstrated *the inevitability of the historic process* with which he is concerned. The partisan deals with fluid circumstances: on all sides men still exert conflicting wills, marshal forces, use weapons, and achieve or reverse decisions. The historian deals with fixed and irreversible patterns of events; all weapons have already been fired; all wills have been spent; all decisions have been achieved; and what is irreversible has assumed the aspect of the inevitable.

“This, the approach from the historian’s angle, accounts for the much-debated undertone of inevitability that runs through this book. As a partisan I had repudiated many of the deeds of my chief character which as a biographer I demonstrate to have been inevitable. The contradiction, however, is more apparent than real. In both my capacities I have argued from the same philosophical-political premisses, but from different and partly conflicting angles.” (*Stalin*, by I. Deutscher, Introduction to 1961 edition, my emphasis – HR.)

I now believe that the collective actions of human beings are relevant to history, and that the actions of individuals do contribute to – and are part of – these collective actions. What each individual contributes by his activity and the price he is willing to pay in efforts and sacrifices, is very much a function of how he or she balances the sacrifices and efforts involved against the eventual probable effect of that activity. It is very much a personal decision. And this decision is influenced by the assessment one makes of the role of the individual in history.