

**MODERN SCIENCE AND MORAL VALUES**

**Man Versus Nature: Contemporary Moral Dilemma**

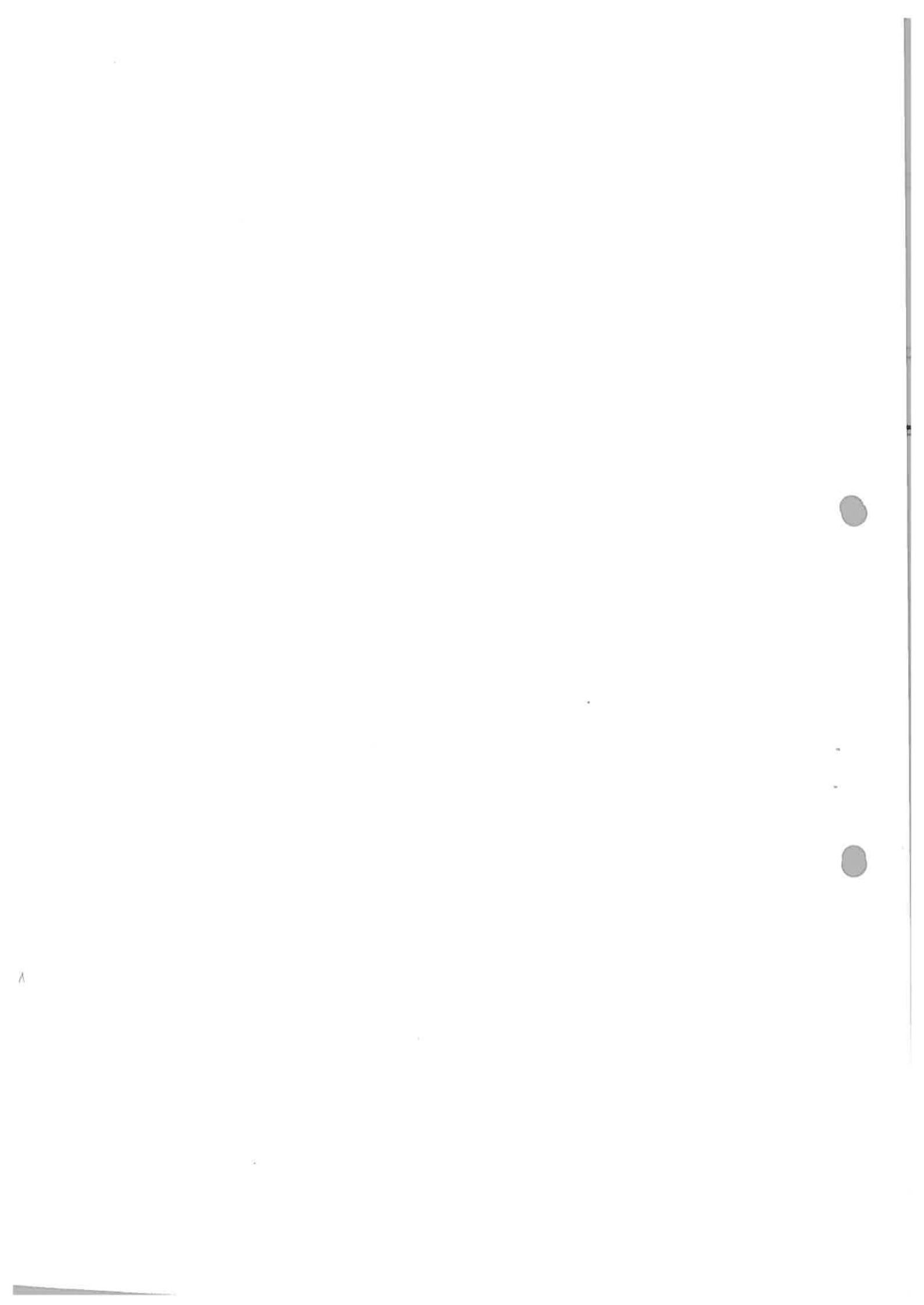
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## Man Versus Nature: Contemporary Moral Dilemma

The problems of moral values is the problem of an individual's choice and selection in human context. It is, however, felt by many thinkers of our age that man--- the being who has to choose, take decisions and thus create the moral context, is being reduced to an infra human status. In the last century Kierkegaard (1813-1855) fought against, what he called, 'the system'; in this century Marcel, Abagnano and many other writers noted the despairing effects of scientific sophistication on contemporary life. With the advance of sciences and almost universal acceptance of scientific methodology --- analysis and experimentation, to investigate and account for most aspects of human life, man's attitude towards his own life has undergone a change which some of us would rather hesitate to welcome.

The questions which I have set before me to look into are three: (i) What is 'modern' about 'modern science'? (ii) What scientific implications have caused a change in our value-reckoning? (iii) What possibility is there for a scientific re-orientation and thus for adjusting our moral perspectives? Can we take any help from historical religions possibly from Islam in this regard?

Science is distinguished from non-science because of its method; 'modern' science is to be distinguished from 'old' science

because...

because of its awareness of its method. In this regard I would mention Charles Sanders Peirce (1839-1914) --- the philosopher-mathematician, who made science aware of its methodology. Peirce not only freed science from mediaeval sophistry which still lurked in the writings of some scientists and most philosophers, he also laid the foundations of the unification of sciences with its far reaching effects on contemporary life.

Mediaeval concepts of 'authority' and 'necessity' which had their revival in the writings of German Idealists and Marx could be seen to work in scientific theories too. Lamarck's (1744-1829) doctrine of the inheritance of acquired traits was in principle the thesis of the present determining the future through inner promptings. It is because of this that Lamarck confused 'biological change' with 'biological progress' and perfection. In the physical sciences the story was not different. Kant's belief about the solar system as having evolved to its present state was soon to be interpreted as an expression of the 'eternal dialectics of nature'.<sup>5)</sup> This dialectic had one principle: the necessary 'indestructibility of motion'.<sup>6)</sup> Peirce was against this necessitarianism in science.<sup>7)</sup> Peirce substituted 'fallibility' for 'immutability' and 'contingency' for 'necessity'.<sup>8)</sup> For him, science was concerned with temporality rather than eternity.

From this follows that both man and science are fallible. Man does not hold any privileged position in the scheme of things and like things is a being of contingency. Modern science is

modern...

modern because it is eminently conscious of these basic features. The third significant feature of modern science which had profound influence on contemporary life was the craving for simplicity and objectivity. The concept of 'simple substances' is not new. Philosophers with <sup>Rationalists</sup> mathematical orientation, for example, Descartes and Leibnitz, had always looked for 'simples' in the complexity of their world. Empiricists like Locke and Hume had also believed in the 'sensorily' simple facts. However, with the rise of atomic theory after the experiments of Rutherford and the development of the logical-mathematical theory of Russell and Whitehead, the rationalistic simplicity and the 'empirically objective' came together. The result was Wittgenstein's Tractatus-Logico-philosophicus and the universalisation of scientific concepts to cover most fields of humanities and social studies e.g. linguistics, history, economics, psychology, sociology, education and ethics. <sup>9)</sup>

Logical position \*

A great number of scientists, philosophers and economists joined hands to systematically work out the implications of the modern science's principle of rationality and meaningfulness. <sup>1)</sup> For modern science, any thing that claims significance ought to be established mathematically and logically or empirically. <sup>a)</sup> <sup>b)</sup> <sup>a.)</sup> Mathematics is tautological, conventional, purely arbitrary and thus irrational. <sup>b.)</sup> Experience and the empirically given has no inner governing principle, is problematic, chance oriented and chaotic. <sup>2)</sup> Thus, 'the rationality principle' of modern science implied irrationality; the hope of man ended in scientific despair.

Russell....

Russell, Whitehead and Carnap, in their separate ways argued for a break down between mind and matter, the inner and the outer. Whitehead hoped to overcome the traditional dualism of the world of public, scientific, objects and the private sensory world. Russell achieved this by arguing for a basic, colourless, neutral world which could give rise to the mental as well as to the physical. Both Whitehead and Russell implied that there is complete ontological homogeneity between the psychical and the physical, between man and nature. However, since there is no ontological distinction between man and nature, there cannot be a true distinction between the human sciences and the natural science. There cannot be a difference between science and non-science due to any difference between their mutual objects of reference; because there are no different kinds of objects. The difference between science and non-science, between the human and the natural sciences is that of language rather than of facts. This appear to be Carnap's thesis as well. The unity of sciences, as envisaged by Carnap, is at the level of communication and not at the factual or ontological plane. This resulted in synthesizing science and scientific results, man and nature, value and fact, linguistically. It is no surprise that most contemporary philosophers, scientists and philosophers of science have kept themselves busy with techniques of analysing language and Wittgenstein till his death in 1951 was busy with the problem of language.

This concern with the unification of sciences, spread of the principle of rationality and objectivity to cover most human enterprises, in principle ought to be welcomed as in fact has

been...

been done by some scientists and philosophers. It has been argued that the identification of nature and man has given rise to our twentieth century humanism. People have argued that modern science which is so cautious and modest in its claims has created a sense of dignity in man; that relativity physics has put the human observer in the physical universe as an irreplaceable element; that the uncertainty principle has introduced indeterminacy as an essential feature not only in physics but in the affairs of man as well. Philosophers and scientists have found multi-valued logic and Heisenberg's principle as evidence for freedom and dignity of man. The general opinion, thus, seems to be that modern science has created a new world of values and has re-asserted traditional moral values too. I believe there is some truth in what has been said about modern science but I hold that it is not the whole truth.

The fact to which I would like to draw your attention is that this unification of man and nature was not achieved without serious casualties. In this 'unification' man has been the loser. He has lost himself to the dictates of nature. In spite of all mention of 'unbiased', neutral foundation of man and nature, explanations in life and human sciences have tended to be physicalistic. We remember the Neurath-Hempel 'physicalistic' reductions of psychological phenomena. Recent biological

explanations...

explanations have shown a marked preference for the concepts of physics. Scientists have found analogies between physics and biology. The concepts of 'mutation' and 'emergents' are said not to be different from the 'discontinuities' of Quantum Physics; terms and notions of 'field physics' have already been assimilated to social and psychological explanations. The living cell is said to be like the molecule. The difference between the two, it is said, is not of ingredients but of complexity and organization. No doubt the concept of organization is non-physical and is transported from life sciences to physics. Nevertheless, the term as used today has little 'non-physical' about it.

'Organization', as understood today is 'order in an actual whole'.

This 'actual whole' may be a cell, a fighting army or a sewing machine. Norbert Wiener has made this point clear in his

<sup>12)</sup>  
Cybernetics and Society. Thus, what the modern science has

achieved is not a unification but reduction and assimilation.

What could not be reduced and assimilated to physics and nature is a concept that is suspect.

Russell had visualised in 1918 what such scientific enterprise would imply. He wrote:

"That man is the product of causes which had no provision of the end they were achieving; that his origin, his growth, his hopes and fears, his loves and his beliefs, are but the outcome of accidental collocations of atoms;...Only within the scaffolding of these truths, only on the firm foundation of unyielding despair, can the soul's habitation henceforth be safely built."<sup>13)</sup>

Russell...



Russell, thus, at one time identified modern science with despair and a morally desolate world. It should, however, be noted that 'despair' is not a single, isolated fact. It is an attitude which colours total personality of man. It generates helpless individuality and insecurity. While Islam regards 'despair' as a sin, contemporary competitive life makes it a positive virtue. A hopeless despairing person is one who does not believe in any prospect of fulfilment due to the presence of other people. For such a person every one else is a danger to his being and is thus an arch enemy. The basic category in such a situation is that of 'otherness' rather than of 'togetherness'.

Recent writers on moral issues and men of letters have taken this state of affairs as the ultimate social structure. 14) Sartre, 15) Simone de Beauvoir, Max Frish and a good many other contemporary literary figures have emphasised this utter 'outsidedness' in human affairs. Sartre in his recent work 16) Critique de La raison dialectique analyses this situation. Here man is shut into his own devices for annihilating others because they are danger to his being. The world is short of material goods and every one is engaged in pursuing his selfish ends. We are not unlike the 'windowless' atoms of Leibnitz. Even if we are standing in a queue, waiting for a bus, this seriality is a mere semblance of unity or togetherness. Every one in the line is waiting for his turn to get a seat in the bus.

Atomicity ...

Atomicity and Seriality has given rise to 'apathy' and not to  
17)  
Sympathy. Interpersonal relations have given way to 'impersonal'  
attitudes. These attitudes have coloured professional ethics as  
well as bureaucratic officialdom. The executives of Nazi  
concentration camps always had an impersonal attitude towards  
killings of their prisoners. Thus, modern science developed since  
the days of Peirce, a post-Peirce science, has led us to a post-moral  
life. Recent sociological studies have shown a marked proneness to  
violence in people exposed to modern scientific ideas and living in  
urban areas. The reason behind this malaise, as we have tried to  
argue, is that modern science is pre-eminently 'thing-bound' rather  
than 'person-oriented'.

We come now to the last problem: whether it is possible  
to have a healthy reorientation of science and to re-adjust our  
moral perspectives. In this regard the most important issue is  
the rehabilitation of the very concept of man. Modern science  
freed itself from mediæval 'necessitarianism' but it retained the  
mediæval notion of man as essentially evil. The early church  
fathers described nature and life --- human as well as animal, as  
18)  
utterly profane and corrupt. That modern science subscribes to this  
philosophy is betrayed by its apathetic and amoral attitude towards  
life and any thing human. This in itself is somewhat surprising.  
The West which became the inheritor of Muslim science did not  
grasp the philosophy of man behind this science.

(i) The basic philosophy behind Islamic teachings is that

of...

of welfare and not of salvation. 'Salvation' is a medieaval monastic concept and in the teachings of the Quran and the Prophet we do not come across any mention of it. In fact, there are traditions<sup>19)</sup> as well as passages in the Quran which clearly prohibit<sup>20)</sup> monastic ideas. The reason for such injunctions ought to be obvious to any contemporary student of human psychology. Islam expressedly says that to begin with all persons are of equal merit, they are born in purity. It is only afterwards, by their efforts<sup>21)</sup> and actions that they become good or bad. Thus, by one stroke Islam removes from the being of man the metaphysical cloud of eternal sin.

(ii) Islam further tells men to realise that all other creatures are subservient<sup>22)</sup> to him. "We have bestowed dignity on man ... and given superiority ( *فضلت* ) to men over other beings<sup>23)</sup> We have created." We are also told that man is superior even to<sup>24)</sup> angels and he is described as the vice-gerent of God. However, man is not only to rule the world but to do it justly and according to moral principles. Islam never lets man overlook the moral horizon of his actions. It declares those persons to be the real<sup>25)</sup> inheritors of earth who follow the right moral path.

Thus as opposed to medieaval concept of man, Islam<sup>1)</sup> makes man responsible for his actions; removes the stigma of eternal sin,<sup>2)</sup> makes man second to God yet places heavy moral responsibility on his shoulders. This responsibility does not end in merely performing outward religious rituals. Man is supposed to have a healthy,

dignified...

dignified and confident attitude towards natural phenomena. He should neither lose hope nor despair in the face of natural calamities since he by his will and effort can put things. In contradistinction to the view of man accepted by contemporary thing-bound science, Islam declares man to be superior to nature. He cannot be reduced to the merely material and the mechanical. On the other hand, all the wealth of heavens and earth is harnessed to man's needs. Things are created but not in vain. Even the break of the day and the setting of the sun are significant phenomena. The universe is contingent but it is not subject to the caprices of blind satanic will. A weltanschauung which so harmonizes in itself the due demands of individual freedom, moral responsibility and human dignity has always been a potent civilising force in history.

Modern science with all its material gifts to human beings has ushered our lives into an era of uncertainty and moral crisis. Danger to man is not from religion, as Marx would have us believe, but from science which has made nature its ideal and the permanent frame of reference. In Islamic philosophy of science the free moral agent has more value than any other thing in this universe. Man has value because he shares in divinity when he chooses and decides. When man forgets the distinction he has, he is dwarfed by nature and the thing-bound science. It is no surprise that in spite of the development of science in the last three centuries and its phenomenal progress in recent times, we have swung between different moral crises but have not broken any new moral ground since the advent of Islam.

## FOOTNOTES

- 1) S. Kierkegaard, Concluding Unscientific Postscript, pp 275, 292-4, 312
- 2) M. Marcel, Philosophy of Existence, pp 1-3
- 3) N. Abajnano, 'Outline of the Philosophy of Existence' in Philosophy and Phenominological Research, Vol IV, p 200
- 4) J. M. Burges, 'The Value of Science' in Freedom and Restriction in Science, pp. 12-13.
- 5) F. Engels; 'Introduction to the Dialectics of Nature' in Marx & Engels: Selected Works pp. 342-344, 353.
- 6) op. cit. pp. 351, 352, 35.
7. C.S. Peirce: 'The Doctrine of Necessity Examined in Essays in Philosophy of Science pp. 170-188, specially pp 177-78
8. C.S. Peirce: 'The Scientific attitude and Fallibilism'(pp 42-59); 'Concerning the Author' (pp 1-4) in Buchler: The Philosophy of Peirce (1940) also J. Buchler: Charles Peirce's Empiricism (1939) pp. 74-78.
- 9) Logical positivism and its different shades developed since the publication of the Tractatus bear testimony to our observation. Carnap's efforts in this regard and the contributions of the Minnesota Studies ought not to be forgotten.
- 10) Discussions in Philosophy of science journals and seminars eminently bring out this point.
- 11) (i) C.G. Hempel: 'The Logical Analysis of Psychology' in Feigl and Seller's Readings in Philosophical Analysis pp. 373-384.  
(ii) R. Carnap: 'Logical Foundations of the Unity of Science' in op. cit; also carnap: Unity of Science (London 1934)
- 12) N. Wiener: Cybernetics and Society (1952) pp. 31-32, 75-76.
- 13) B. Russell: 'A Free man's Worship' in Mysticism and Logic(1918)p.51
- 14) J- P. Sartre: Being and Nothingness (Washington 1966), Critique de la raison diablectique (1963); for easy reference: R.D. Cummings(ed): Philosophy of J-P. Sartre
- 15) Simonede Beauvoir: She came to stay and other novels.
- 16) e.f. Cummings: op. cit. pp. 435,436,444-45,

- 17) Cummings: op. cit. pp. 436, 460-467
- 18) c.f. J. Hick: Evil and the God of Love (1966) pp. 316-327; also foot note on p. 322. Hick quotes W. Temple and Reinhold Niebuhr who even in this century believe in the essential sinful nature of man.
- 19) La rehbaniyat fil Islam
- 20) Al-Quran - al Hadid: 27, all references are to the Holy Quran.
- 21) Beni Israil: 7, al-Hadjj: 77, Al Baqra: 141
- 22) al-Hadjj: 9
- 23) Beni Israil: 70, Yunus: 14
- 24) al-Baqra: 4, 30-38
- 25) al-Anbiyya: 105
- 26) al-Hajjr: 22-23, al-Ibrahim 32-33; al-Araf 10-11, al-jasia 12-13
- 27) al-Yunus: 24, 67; al-Ibrahim: 19-20, al-Nihal: 3, al-Aunbiyya: 16, al-jasia: 22
- 28) al-Baqr: 164