I receive the World Marxian Economics Award with gratification and gratitude. This is also a timely occasion for me to look back and assess my work.

Through the decades, I have worked within different fields of analysis, such as the social structure of the economy and in particular the economic identification of the new middle class; the temporalist solution of the so-called transformation problem; the theory of crises based on the tendential fall in the profit rate; a critique of the Ricardian comparative advantages; the development of a Marxist dialectics; the materialist theory of knowledge and its class content; and the internet and the computers as elements of deep societal and economic changes.

My research has been spurred by the momentous transformations since World War II. But in spite of these transformations, the nature of the beast has not changed; namely, the production of value and surplus value. In other words, capitalism is inherently contradictory and its fundamental contradictions become manifest in a variety of ways, such as economic and financial crises, poverty, destitution, racism wars and the destruction of our natural habitat. Marxism is the only theory suited to inquire into these contradictions and expose capitalism’s irrationality in terms of human needs.

The ten minutes available to me are of course insufficient for a proper appraisal of my past and present efforts. I will confine myself to two of my research areas because this is where further development is needed.

The first is dialectics as a method of social research. The economic theory of Marx can be understood and correctly applied only if embedded in his notion of dialectics. And Hegel does not help!
In my book *Behind the Crisis* of 2011, I outline a notion of dialectics drawn from the work of Marx. Some of its essential features are social phenomena, and thus economic phenomena, and are always both potential and realised, and both determinant and determined. As such they are subjected to constant movement and change. Therefore, social phenomena must be seen in their *temporal* sequence, rather than as moments of an economy tending towards equilibrium, where time does not exist. Moreover, in this temporal sequence, some phenomena are tendencies, and other are counterten- dencies. Reality is continuous movement and change. This is a long way from equilibrium.

But this movement is not chaotic, it has a direction. From the Marxian perspective, capitalism tends towards its own supersession through a series of crises and recoveries. Each time crises occur, they are more severe and destructive, relative to the long-run tendential fall in the world profit rate. On the other hand, for the mainstream interpretation, capitalism tends towards not crises, but equilibrium. This is the centrepiece of neoclassical economics and of almost all other economic theories. They exclude time and apply this timeless dimension to their view of reality. But reality is dynamic and time is its fundamental feature.

Let me give an example. The so-called transformation problem arises because time is cancelled. If the perspective of equilibrium is accepted, the whole of Marx’s theory collapses. But if time is put back into the analysis, there is nothing wrong with Marx’s transformation procedure. It is as simple as that.

But temporalism is not enough. To understand Marx’s transformation procedure, one needs not only a temporalist perspective but also a dialectical view. In essence, each production period is followed by another. The latter begins when the former ends, so the end point of period 1 is also the beginning of period 2. At the end of period 1, its output becomes realised. But this is also the potential input of period 2. When period 2 begins, the input that was potential becomes realised.

The second area of research I would like to mention is the theory of knowledge. This is practically ignored by contemporary Marxist economics. With the general application of computers and the digitalisation of all spheres of society, the need for a truly materialist epistemology has stepped out of speculative philosophy and has taken centre stage in the social sciences.

Concepts such as the information society, cognitive capitalism, and digital capitalism attempt to make sense of this changing reality. They highlight some significant aspects, but all of them displace from their central role the three basic pillars on which Marxist epistemology should rest: class, value and dialectics.

Contrary to received wisdom and also to Marxist “reflection theory,” but in line with neurological research, knowledge is material. The reason is that thinking is an expenditure of human energy that causes a change in the nervous system, in the functional connections between neurons in the brain. If energy is material, these
changes are material too and knowledge, as the product of these changes, is mate-
rial as well.

All that exists is material.

Then, the basic divide is not between material reality and knowledge, but between objective reality (that which exists independently of our perception of it) and our knowledge of it.

Both are material even if knowledge is intangible.

This is of fundamental importance for the production of value. If knowledge is denied materiality, knowledge cannot produce value and surplus value, which are material. Mental labour, as a bedrock of the production of value, is more and more relevant in modern economies. But its theorisation lags behind its growing importance.

Having established that knowledge is material, I deal with some of its specific aspects.

First, I probe into its generation by modelling it on the analysis of objective production, as in Capital Volume One. Consequently, there are two labour pro-
cesses, the objective labour process and the mental labour process. Their constitu-
tive elements are transformations, both objective and mental. Here too, dialectics is required. A labour process is objective if the objective transformations are deter-
minant of the mental ones. And vice versa.

Second, knowledge is generated by individuals, but it has a social content as well. Accordingly, I inquire into the generation of individual and social knowl-
edge, in their mutual interrelation. Central to this difference is Marx’s distinction between concrete individuals and abstract individuals. These are two aspects of the same person, just as labour is always concrete and abstract. As abstract indi-
viduals they are carriers of shared social relations. This is why they can generate knowledge with social content, content that can be shared by many individuals.

Third, the class content of knowledge is introduced and opposed to the concept of the class neutrality of knowledge. This is a necessary step for the critique of mainstream economic theory, which is based on a supposed class neutrality. Homo economicus’ rationality seems to be a-historical, while in reality it is the essence of capitalist rationality.

Subsequently, all the points above are brought to bear in the analysis of the internet as a battlefield for the generation of value and surplus value, and of new competing forms of knowledge with contradictory class rationalities.

Finally, I deal with computers and robots. The question is whether they can think and thus produce knowledge. After reviewing the differences and similiar-
ties between formal logic and dialectical logic, I conclude that computers cannot think as humans do for a very specific reason, because they cannot think dialectically.
Since the time I started my research, much water has passed under the bridge. The 1960s and 1970s were years of a strong labour movement and of strong social movements. Those were hopeful times. Those who were fortunate enough to live through those years have had a chance to catch a glimpse of an alternative society, based not on egoism, exploitation, and competition, but on altruism, cooperation, and self-management.

But since the 1980s the tide has turned. An economic and financial crisis of major proportions is again knocking at the door; the destruction of our natural habitat proceeds unchecked; the divide between the poor of the world and the absurdly rich has never been so great; the dark clouds of a new world war are gathering on the horizon; right-wing ideologies resurrect and even fascism is raising its ugly face again. These are the dangers the new generations will have to face. The difficulties ahead for them will be immense. But the contradictory nature of the system is such that each time capitalism wins, the anti-capitalist forces regroup and counterattack with new forms of resistance. My hope is that my work will be of some help in their struggle.

Thank you!