

**ALVIN TOFFLER: THE THIRD WAVE** (1980. London: Pan Books Ltd in association with William Collins Sons & Co. Ltd)

*The Third Wave* is essential reading.

We study history books filled with the minutiae of human carnage, when in this global world we should be studying the great revolutions that brought about fundamental changes in human perceptions and ways of living. We should be studying books like Alvin Toffler's *The Third Wave*;

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ks that lift us out of narrow, limited perspectives and enable us to develop a holistic understanding of human progress. Our thinking about human development should not be dominated by conquest and exploitation; these should be put into proper perspective by widening the contexts in which they occur.

Using waves as the metaphor for changes in the means of production that result from technological advancements, Alvin Toffler puts all of human history in context and makes it possible for us to understand the meanings we have made and are making of our existence.

As all communities in a particular wave, regardless of cultural differences and geographical location, adopt similar tools, resources and sources of energy, they develop a common mode of production that leads to common labour practices, pace of life, means of communication, mobility, understanding of environment and belief systems. In *The Third Wave*, movement from one wave to the next is shown to be the result of major technological innovations that lead to new modes of production and new patterns of life.

The Agricultural Revolution constitutes the First Wave, the Industrial Revolution, the Second Wave and the Third Wave is based on the revolution brought about by Computer Technology. *The Third Wave*, first published in 1980, gives the approximate rise of each civilizing wave: the Agricultural Revolution about 8000 B.C., the Industrial Revolution, between 1650 and 1750 A.D. and the third, the Computer Age, from about 1955. Toffler does not give exact dates because changes in the human condition are like waves – beginnings and endings cannot be exactly pinpointed.



The land was their natural resource. Human and animal muscle power, sun, wind and water power were their sources of energy; all were renewable. They gave up nomadic ways, lived in settled communities and established large extended families to work the land. They were both producers and consumers and, for the most part, were self-sufficient.

Political and social power in the First Wave of civilization was based on ownership of land and though this changed in the Second Wave, the notion of land ownership as the source of power still persists and is kept alive today through political mechanisms. Politicians,

... are **still not** (my emphasis) elected as representatives of some social class or occupational, ethnic, sexual or lifestyle grouping, but as representatives of the inhabitants of a particular piece of land; a geographical district. First Wave people were typically, immobile, and it was therefore natural for the architects of industrial-era political systems to assume that people would remain in one locality all their lives. Hence the prevalence, even today, of residency requirements in voting regulations. (83)

## **The second wave**

The Second Wave, the Industrial Revolution, brought in the electrically driven machine that totally reorganised human society. Where people of the First Wave were producers and consumers, the Second Wave was characterised by a split between production and consumption. Some became producers but the majority became dependent workers in factories operating machines or in government and private institutions which adopted the factory model of operation – division of labour and assembly-line interdependence regulated by the clock.

This fundamental split between production and consumption led to segmentation in all aspects of life. Work was split into units – division of labour – to accommodate production along assembly lines; time became linear and was split into units – seconds, minutes, hours – to ensure punctuality, synchronisation of work, and to meet deadlines. Families were split into nuclear units as division of labour required individuals not family groups. Men went to work and women stayed at home and acquired inferior status. Space was divided into units and people occupied standardised living quarters. Farms lands were divided into units for the production of

marketable crops. In politics, representative government was reduced to "its ultimate particle," (123) the vote. Atomization, the pursuit of the essential unit became a dominant principle that influenced all aspects of life and would lead eventually to the splitting of the atom (and the emergence of nuclear energy which would herald the Third Wave). (Even the psyche was split. Literature produced novels like *Dr Jekyll and Mr Hyde*, and psychologies of split personalities.)

Production was speeded up through:

- Division of labour that led to

specialization and concentration of work.

- Synchronization of work through the interdependence required by the assembly line.

Machine technology that led to mass production, the standardization of products, mass distribution through markets for mass consumption. Mass production, which needed much more than the local supply of raw materials, led to the exploitation of First Wave countries (in Africa and the East) which were ravaged for raw materials and sources of energy, both human and natural. And as mass production also depended on mass consumption, First Wave countries were roped into the market economy of the colonisers, Britain, France and other European countries, and became consumers of the products manufactured from their raw materials. American industrialism's encounter with First Wave communities was limited to native Americans until after World War II.

The market economy, which was born of the split between production and consumption, created a new relationship between producers and consumers. Consumers, who had formerly been self-sufficient because they were also producers, became dependent on producers for work, goods and services. But their conditions of living were greatly improved as industrialism, though it created dependency, moved them out of mere subsistence living.

For producers, large scale production led to large scale thinking, the development of corporations that undertook large scale projects, such as big buildings, big ships etc. Their control of production led to concentrations of people in urban areas, and to the development of systems such as central banking, the postal system, mass media, mass education, mass transportation, road and rail systems, bureaucracies and representative government. And all this growth culminated in the ultimate product of centralization, the Nation State.

"In such a society, irrespective of its political structure, not only products are bought, sold, traded, and exchanged, but labour, ideas, art, and souls as well." (55) In other words, religious, political and other ideologies grow out of the mode of production. Whether you are communist

or capitalist makes little difference; your way of life is determined by the techno-sphere – the interrelated “energy system, production system and distribution system.”(41).

Conflict in societies that arises from the clash of people in different modes of production can be confused with more readily identifiable symptoms, such as moral or economic issues. According to Toffler:

The Civil War was not fought exclusively, as it seemed to many, over the moral issue of slavery or such narrow economic issues as tariffs. It was fought over a much larger question: would the new rich continent be ruled by the forces of the First Wave or the Second Wave? Would the future American society be basically agricultural or industrial? (37)

The Civil War represented a clash of waves and encompassed a much wider disparity than the ideological differences between Communism and Capitalism both of which adopted the Second Wave mode of production.

According to Toffler the segmentation of society in the Second Wave needed as its concomitant the means for integration:

Industrialism, as we have seen, broke society into thousands of interlocking parts – factories, churches, schools, trade unions, prisons, hospitals, and the like. It broke the line of command between church, state and the individual. It broke knowledge into specialized disciplines. It broke families into smaller units. In so doing, it shattered community life and culture.

Somebody had to put things together in a different form. (75)

Toffler gives us the Integrator as that somebody who reassembled the parts into a new whole. Power could no longer be associated with **ownership** of land or the means of production; it was now vested in the Integrator, the person who controlled **the means of integration**

, i.e. the CEO.

The new power of the Integrators was, perhaps, most clearly expressed by W. Michael Blumenthal, former US Secretary of the Treasury. Before entering government Blumenthal headed the Bendix Corporation. Once asked if he would some day like to own Bendix, Blumenthal replied: 'It's not ownership that counts – it's control. And as Chief Executive that's what I've got!' (77) Under socialism as well as capitalism, therefore, the integrators took effective power. For without them the parts of the system could not work together. The 'machine' would not run. (77)

And

Out of this driving need for the integration of Second Wave civilization came the biggest co-ordinator of all – the integrational engine of the system: big government. It is the system's hunger for integration that explains the relentless rise of big government in every Second Wave society (78)

Left to private enterprise alone, industrialization would have come much more slowly – if, indeed, it could have come at all. Governments quickened the development of the railroad. They built harbours, roads, canals, and highways. They operated postal services and built or regulated telegraph, telephone, and broadcast systems. They wrote commercial codes and standardized markets. They applied foreign policy pressures and tariffs to aid industry. They drove farmers off the land and into the industrial labour supply. They subsidized energy and advanced technology, often through military channels. At a thousand levels, governments assumed the integrative tasks that others could not; or would not perform. {78}

For the government was the great accelerator. Because of its coercive power and tax revenues, it could do things that private enterprise could not afford to undertake. Governments could 'hot up' the industrialization process by stepping in to fill emerging gaps in the system – before it became possible or profitable for private companies to do so. Governments could perform 'anticipatory integration.' (78-9)

... indust-reality, the cultural face of industrialism, fitted the society it helped to construct. It helped create the society of big organizations, big cities, centralized bureaucracies, and the

all-pervasive marketplace, whether capitalist or socialist. It dovetailed perfectly with the new energy systems, economic systems, political and value systems that together formed the civilization of the Second Wave. (125)

Toffler makes us aware that in all areas of living we adapt to the means of production and become products ourselves. We tend to use the word "freedom" very loosely without a real understanding of the extent to which we conform to the production rationale that we adopt at a given time. We equate freedom with elections because we abstract both from the mode of production.

According to Toffler:

... elections,(in the United States of the 'fifties) quite apart from who won them, performed a powerful cultural function for the élites. To the degree that everyone had a right to vote, elections fostered **the illusion** (my emphasis) of equality. Voting provided a mass ritual of reassurance, conveying to the people the idea that choices were being made systematically, with machine-like regularity, and hence, by implication, rationally. Elections symbolically assured citizens that they were still in command – that they could, in theory a least, dis-elect as well as elect leaders. In both capitalist and socialist countries, these ritual assurances often proved more important than the actual outcomes of many elections. (89)

In applying Toffler's analysis to South Africa, I see that because we now have universal suffrage, we believe we are free. But what does this 'freedom' mean? It simply means that Black people are no longer restricted to the lower end of the production line. Under apartheid, the most effective systems for curbing Black progress were job reservation and Bantu Education that kept Black people in predominantly First Wave mode while the privileged class operated in Second Wave mode. Oppression depended on denying Black people access to control of new modes of production. The racism inherent in the process obscured our ability to see that power was in the hands of those who control the mode of production. Now that we have a Black government, we are beginning to understand. With industrial systems breaking down, with new modes of production in the offing, and with an understanding of the way we are moulded by modes of production, we may perhaps find ways to establish a more equitable society. But that is, and I believe will always be, an idealistic notion.

Right now in South Africa, we need to examine carefully and without reference to race, where

control of integration of the modes of production lies and how this control is applied.

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## **THE THIRD WAVE**

In his analysis of the transformation from First Wave to Second Wave civilization, Toffler makes it clear that it is the change in the techno-sphere (i.e. the interrelated energy, technology and distribution systems) that brings about new ways of living, new attitudes, new ideas and new understandings of the human condition.

The principle of integration which underpinned Second Wave civilization and led to mass production and its concomitants of synchronization, standardization, concentration, maximization and centralization, is the very principle that comes under attack in Third Wave Civilization and leads to the breakdown of industrial systems and "indust-reality" (110) Indust-reality is Toffler's word for a worldview based on machine technology that brought with it "a redefinition of God... of justice...of love...of power...of beauty ... new ideas, attitudes and analogies. ... (that) subverted and superseded ancient assumptions about time, space, matter, and causality" (110). Second Wave understandings are breaking down and leading to crises in every aspect of life.

Crisis in the postal systems. Crisis in the school systems. Crisis in health-delivery systems. Crisis in the urban systems. Crisis in the international financial system. The nation-state itself is in crisis. The Second Wave value system is in crisis. Even the role system that held industrial civilization together is in crisis. (135)

And these crises result from changes in the techno-sphere (new energy-technology-distribution systems) that mandate a reorganisation of our way of working, living and thinking.

## **Energy**

The Second Wave depended on fossil



diversity. - Standardisation that resulted from mass production led to standardisation in all aspects life, in products, fashions, conventions and thought patterns and the demand for equality. With the Third Wave comes diversity. The long runs of mass production are giving way to short runs for niche markets, specialization, customization and greater individuality.

- Mass circulation of newspapers and magazines is dropping and community newspapers and specialist magazines are becoming more common.

- One-way national broadcasting systems have given way to greater diversification. There are many more radio stations and they cater to specialized audiences. With TV, in addition to national broadcasters, there are also private stations and cable TV which provides specialized viewing packages. With Citizen Band radio came two-way communication between broadcaster and receiver. That led to interaction between broadcasters and receivers; now Radio and TV make provision for listener and viewer feedback.

- TV provides a variety of images and information about other parts of the world. As this information is constantly being updated, understanding of the world has not only increased but is constantly changing.

The Third Wave can be called the Information Age because of the growth and expansion of information, its sources, ease of access, greater literacy, audio-visual media that do not necessarily require literacy, social media, and so on.

... a First Wave child growing up in a slowly changing village built his or her model of reality out of images received from a tiny handful of sources – the teacher, the priest, the chief or official and, above all, the family ... The images built up by the village child, therefore, were very narrow in range. (167-8)

The Second Wave multiplied the number of channels from which the individual drew his or her picture of reality. The child no longer received imagery from nature or people alone but from newspapers, mass magazines, radio, and, later on, from television. For the most part, church, state, home and school continued to speak in unison, reinforcing one another. But now the mass media themselves became a giant loudspeaker. And their power was used across regional, ethnic, tribal, and linguistic lines to standardize the images flowing in society's mind-stream. (168)

Today the Third Wave is drastically altering all this. As change accelerates in society it forces a parallel acceleration within us. New information reaches us and we are forced to revise our image-file continuously at a faster and

faster rate. Older images based on past reality must be replaced,  
for, unless we update them, our actions become divorced from reality and we  
become progressively less competent. We find it impossible to cope.  
(169)

An information bomb is exploding in our midst, showering us with a shrapnel of  
images and drastically changing the way each of us perceives and  
acts upon our private world. In shifting from a Second Wave to a Third Wave  
info-sphere, we are transforming our own psyches. (167)

This speed-up of image processing inside us means that images grow more and more  
temporary. Throwaway art, one-shot sitcoms, Polaroid  
snapshots, Xerox copies, and disposable graphics pop up and vanish. Ideas, beliefs,  
and attitudes skyrocket into unconsciousness, are challenged,  
defied, and suddenly fade into nowhere-ness. Scientific and psychological theories are  
overthrown and superseded daily. Ideologies crack. Celebrities  
pirouette fleetingly across our awareness. Contradictory political and moral slogans  
assail us. (169)

The constant updating of information and images leads to more complex understandings, more  
informed choices and inculcates notions of individual and democratic freedom. It leads to a  
growth in brain power, to greater intelligence.

Second Wave civilization, which was ruled by linear and atomized thinking, a product of the  
assembly-line culture, developed analysis based on the direct link between cause and effect. In  
the Third Wave cause and effect analysis has given way to contextual analysis where causes  
arise from a multiplicity of factors.

The discovery of ways to use technology to create diversity breaks down the standardisation  
that resulted from mass production and is returning us to customization, (which was a First  
Wave practice). The Third Wave through increasing interest in DIY activities and involvement of  
consumers in elements of production (275-321) is bringing together, the producer and consumer  
– “prosumer” (275) (In the First Wave people were producer-consumers.)

In 1973, when OPEC choked “off the world’s supply of crude oil, it sent the entire Second Wave economy into a shuddering down-spin.” (143) That was the beginning of the realisation that energy based on fossil fuels was coming to an end.

Techno-rebels, people who see the technological threat to life on earth, ... “argue that in moving into the Third Wave we must advance, step by step, from the resource-wasteful, pollution-producing system of production used during the Second Wave era towards a more ‘metabolic’ system that eliminates waste and pollution by making sure that the output and by-product of each industry becomes an input for the next. The goal is a system under which no output is produced that is not an input for another production process downstream. Such a system is not only more efficient in a production sense, it minimizes, or indeed eliminates, damage to the biosphere. (165)

*The Third Wave*, which reads almost like science fiction, is an exciting exploration into human capabilities. The breadth and depth of Toffler’s insights, which are scarcely captured in this review, can only be appreciated by firsthand encounter with the contents of the