

Alienation, Climate Change, and the Future of Humanity

Alienation is a basic feature of people's lives under the capitalist system. Alienation molds and affects people's entire lives and every aspect of their personalities. A fundamental characteristic of alienated people is their inability to admit and change the alienating aspects of their lives. This phenomenon is not limited to the so-called average or backward person. Rather, alienation dramatically affects the life of every socialist and leftist, as well as the internal life of every single leftist group and "revolutionary" organization.

In order to build a genuine revolutionary party, it is necessary to fight the elements of alienation within the organization. This article will illustrate how this kind of struggle is not merely important, but *critical*, if we want to be successful in building a true revolutionary party. It will examine the elements of alienation, and explain the importance of battling alienation in the process of building a revolutionary organization and a collective revolutionary struggle against capitalism. The application of this principle will be illustrated in the context of climate change, by explaining why and how alienation is preventing the formation of what should be a massive response to climate change, and thus contributing to the very real danger that it could wipe out the human race.

Human Evolution and the Roots of Alienation

To understand how the human brain has become so alienated—that is, so removed from its normal balanced state—we need to understand how human alienation developed historically. To begin with, humans arose from nature, and lived in the natural environments to which evolution had adapted them. But as human society and culture developed into the complex, highly technological environment of the modern day, humans were increasingly separated from nature in their daily lives. By now, this separation has become so extreme as to cause us to live in a chronic state of extreme anxiety. People with chronic anxiety and depression develop an abnormally large, malfunctioning amygdala, a condition that cripples and destroys rich human interactions. This kind of sickness stands in stark contrast to human interactions in pre-class societies.

The atom is the fundamental unit of nature. It includes two fundamental units: proton and electron, or "positive" and "negative" particles. The interaction between the protons and the electrons and other particles in the atom exemplifies to a large degree how all interactions in the material world work. When there is balance in the material world, neither the negative nor the positive is more valuable or powerful than the other. They interact and exchange with one another in a balanced way.

This same balance that we see in nature can also be seen in the rise of the human race. The class societies that we know from recorded history represent only a fraction of the time since modern humans (*homo sapiens*) evolved as a species over 100,000 years ago. The consolidation of class society did not start until agriculture became fully developed in Mesopotamia around 5000 BC. In other parts of the world, it arose even later; for example, in South America, class society did not arise until sometime between about 1000 B.C. and 300 A.D. Thus, for the greatest part of the span of human existence, we lived as hunter-gatherers in communal groups consisting of a handful of extended families. In this social context, humans interacted in a balanced way: the "positive" and "negative" emotions and social interactions among the group members were balanced, so as to create stability in the life of the community.

During this vast span of human prehistory, our brain and our emotions were more balanced than today, when human society is in a steep decline. Our "negative" emotions such as anger, fear, anxiety, rage, and aggression were used as they are supposed to be used: for hunting, and for the defense of the group against predators and the misfortunes of nature. The "positive" emotions such as love, tenderness, compassion, sharing, solidarity, and connection to others were also used on a regular basis. Because

people's deep social and emotional connections were not limited to the nuclear family, positive emotions were displayed all the time.

This does not mean that humans lived in full harmony, given the problems and contradictions inherent in the need to survive under "primitive" conditions. But none of their problems were as *artificially* (i.e., with no connection to survival in nature) explosive as they are in the decadent class society of today. To give just one example: children were raised by the entire group, not by an isolated and stressed-out mother who yells at the kids because she does not have other outlets for her frustrations—a typical way in which "negative" emotions arise today. In today's society, where the basic unit is the nuclear family, children are damaged by living in a social environment dominated by the negative emotions that reflect class society. In a small, close-knit community of hunter-gatherers, on the other hand, mothers are normally not overcome by stress, because the children are raised collectively by the entire extended family or community.

The human brain evolved over many millennia to be ideally adapted to the life lived by hunter-gatherer communities. The parts of the brain that are responsible for "negative" emotions are balanced against the parts in the brain that are responsible for "positive" emotions. In the hunter-gatherer era, "negative" emotions, which are centered inside and around the amygdala in the brain, were activated by acute situations of real physical danger, such as when a lion was chasing you. Today, those same neurological mechanisms are still in our brains, but our circumstances have changed drastically. The result is that our stress responses are maladapted to our living conditions; the same reactions that a hunter-gatherer had to the presence of a dangerous predator are now triggered by when somebody cuts in front of you in the highway, as well as in many other examples in the daily life of today's chaotic, complex society.

The balance of pre-class society was destroyed by class societies, which are based primarily on the "negative" feelings prompted by competitive social interactions. The essence of capitalism, for example, is the pursuit of profit at the expense of others, and along with it, the persistent exploitation and oppression of the great majority. In class societies, the human brain and body literally become sick as a result of the mismatch between the social environment that we evolved to live in and the one we actually inhabit. **This sickness is the physical and psychological manifestation of the essence of human alienation.**

In primitive communist societies the human bonding and solidarity within the tribe can be very deep. Many of the rituals in these tribes emphasize the connection to nature, with a vitality that bonds everyone in the tribe into one cohesive community. The vitality of "positive" emotions and interactions is used in primitive collective communist societies to bind the people together in their collective struggle to survive against the odds of nature.

As class societies evolved, the connection and solidarity within the community weakened. But only under capitalism, particularly as it is manifested in the most advanced countries, has this solidarity been dramatically shattered, resulting in a feeling of alienating separateness that creates enormous anxiety.

Under feudalism, for example, the peasants' lives were often utterly miserable, and their suffering was intense. But their culture and belief system taught them that their place in society was fixed for "eternity," and in any event, being peasants was the only life they knew. More importantly, in the feudal village, everyone knew the other villagers well; they had played together as children, and spent their entire lives living in close proximity. Thus, personal identity—the "I"—was not, as of yet, experienced as fully separate from the village as a whole. Only with the rise of capitalism did the sense of deep separateness from others begin to play a significant role in the ordinary person's sense of self—a phenomenon that gradually increased as society became more and more complex.

Capitalism in Decay Elevates "Negative Emotions" to New Heights of Destructiveness

By now, in the advanced capitalist countries, the sense of community has been almost entirely broken, and humans pervasively experience themselves as separate entities that operate within the

insecure parameters of the blind market. Human beings are just commodities on the labor market and in the social scene. Behind the façade of the social commodity, everybody feels alone. The only way to escape this deep feeling of loneliness and separateness is by turning on the TV or the computer when one comes home. The alienated person must engage in mindless, passive activities in which independent feeling and thinking are surrendered, and one becomes enslaved to the TV or the false sense of connection created by social media such as Facebook.

This experience of separateness is always accompanied by deep feelings of anxiety stemming from the lost feeling of belonging and oneness with the other people in the tribe or the village. Under capitalism, the individual as *separated* from the others reflects the essence of the social order. Bourgeois society idolizes the concept of competitive-individualism, in which each individual must make it alone, in antagonistic relations to others. Worse, the model of human relationships that is created by the antagonistic social economy has *trickled down to the deepest part of our psychology*, so that most are not even aware of it, and no one can easily transcend it.

From this sense of separateness, a type of personality has developed, typical of this historical period, that in the most general way can be characterized as the capitalistic alienated personality. The main feature of this type of personality consists of a deep sense of separateness, accompanied by the resulting anxiety. This anxiety *limits* the alienated person's ability to experience his or her full range of feelings. This limitation, in turn, tends to elevate negative feelings to predominance. Thus, the alienated person can only connect to other people via the anxious mind. In our society, thinking is associated with anxiety and the inadequacy of the insecure self. Most people repeat the same thoughts in their heads continually, and waste a lot of energy on that experience, which is an expression of their emotional boredom and depression, their anger and their stress. Despite what New Age gurus tell us, we are unable to stop the "monkey mind" from jumping around in our brains.

Over the last 40 years in particular, negative emotions have become so powerful and dominant that the structure of the brain is cracking under the social pressure of capitalism. Neurological research over the last 15 years has revealed that in many individuals, the amygdala and its associated systems in the brain, which are responsible for the "negative" emotions of fight or flight, are becoming prominently enlarged, at the expense of other areas such as the hypothalamus, which is responsible for people's sense of well-being and historical memory. As the destructive stress caused by capitalism has penetrated deep into our brains, a growing number of people have begun to suffer from chronic depression, a malady that has been skyrocketing for the last several decades. In cases of deep chronic depression, the amygdala becomes **permanently enlarged and damaged**; and the person cannot recover. Others manifest their reaction to the stress of capitalism by developing conditions such as ADHD or bipolar disorder. Stress also causes the brain to produce harmful hormones that can cause heart attacks and other deadly diseases. Thus, as the brain cannot cope with the destructive demands of capitalism, it produces individuals who are alienated to the point that they cannot function at all.

As the result of millenia of evolution, our brains are wired to function in a collective social society such as existed when we lived in small communities of hunter-gatherers. We are not wired to function as solitary animals, unlike other species such as cats. Thus, even the trained military and CIA personnel who use video feeds and computers to control drone bombers—people who, one may assume, are hardened "patriots" untroubled by moral qualms about killing innocent people as "collateral damage"—are traumatized by the painful scenes of explosions and death that they create. The fact that they are not themselves at risk of harm, and that their killings appear only on a screen, as if in a video game—does not mitigate their anxiety and depression. Even they develop clinical depression and other symptoms brought on by mental trauma and chronic stress. According to *the New York Times*:

"In the first study of its kind, researchers with the [Defense Department](#) have found that pilots of [drone aircraft](#) experience [mental health](#) problems like [depression](#), anxiety and post-traumatic stress at the same rate as pilots of manned aircraft who are deployed to [Iraq](#) or [Afghanistan](#). . .

After analyzing diagnosis and treatment records, the researchers initially found that the drone pilots had higher incidence rates for 12 conditions, including [anxiety disorder](#), depressive disorder, [post-traumatic stress disorder](#), [substance abuse](#) and suicidal ideation.”¹

This proves that living in a capitalist society is not natural for social human behavior and the brain. It makes the brain and the human body sick. It is important to note that the sky-rocketing rate of depression is not the only mental health problem that is getting out of control. The immense social stress from living in this sick system has caused bipolar disorder and ADD to become epidemic. It is clear that these are not cases of simply imbalances in the brain, as the system tells us, but rather the “imbalance” in the brain is a result of immense stress on a normal brain that is breaking down under the pressure of a level of stress on the individual that never existed before the present day capitalist society.

In the last 30 years in particular, “negative” and antagonistic emotions and relationships have reached new, sickening heights. Here is how Marx brilliantly described the source of such alienating relationships:

“Every man speculates upon creating a *new* need in another in order to force him to a new sacrifice, to place him in a new dependence, and to entice him into new kind of pleasure and thereby into economic ruin. Everyone tries to establish over others an *alien* power in order to find there the satisfaction of his own egoistic need. With the mass of objects, therefore, there also increases the realm of alien entities to which man is subjected. Every new product is a new *potentiality* of mutual deceit and robbery. Man becomes increasingly poor as a man; he has increasing need of money in order to take possession of the hostile being. ... The *quantity* of money becomes increasingly its only important quality. Just as it reduces every entity to its abstraction, so it reduces itself in its own development to a *quantitative* entity. Excess and immoderation become its true standard. This is shown subjectively partly in the fact that the expansion of production and of needs becomes an *ingenious* and always calculating subservience to inhuman, depraved, unnatural, and *imaginary* appetites. Private property does not know how to change crude needs into human; its *idealism* is *fantasy*, *caprice*, and *fancy*. No eunuch flatters his tyrant more shamefully or seeks by more infamous means to stimulate his jaded appetite, in order to gain some favor, than does the eunuch of industry, the entrepreneur, in order to acquire a few silver coins or to charm the gold from the purse of his dearly beloved neighbor. Every product is a bait by means of which the individual tries to entice the essence of the other person, his money. Every real or potential need is a weakness which will draw the bird into the lime. Universal exploitation of human communal life. As every imperfection of man is a bond with heaven, a point from which his heart is accessible to the priest, so every want is an opportunity for approaching one’s neighbor, with an air of friendship, and saying, ‘Dear friend, I will give you what you need, but you know the *conditio sine qua non*. You know what ink you must use in signing yourself over to me. I shall swindle you while providing your enjoyment’. The entrepreneur accedes to the most depraved fancies of his neighbor, plays the role of pander between him and his needs, awakens unhealthy appetites in him, and watches for every weakness in order, later, to claim the remuneration for this labor of love.”²

How Most People Conform to Capitalism

When we cannot connect to others through love and solidarity, we lose the ability to develop self-identity, both mentally and emotionally, and we retreat to relationships of *dependence*. Being completely alone is impossible for the great majority. The human brain cannot deal with complete loneliness. Being a very social animal means that most of us will go insane, or get very sick, if we feel constantly very separated from others. The anxiety alone can drive us to suicide.

There are many mechanisms through which we attempt to cope by conforming and becoming dependent on others, without developing a really healthy self; this article will only discuss a few of them. The most common and important one, from the standpoint of understanding alienation, is to conform to our social and economic system by adopting the main features of the marketplace as part of our own

character—to develop the mentality of a commodity; to relate to the living world as a commodity, a thing—in other words, to become a market personality.³

The latest development in the character of the alienated market personality is to identify with machines and machine-created virtual realities. This adaptation to the stress of capitalism comes at the expense of losing the ability to connect with people, causing the social isolation of the market personality to attain new levels. Whether I spend my free time shopping for things and gadgets, or compulsively checking Facebook and surfing the internet, the aim is the same: to forget the pain of my isolation and my doubts about my identity as a human being. It is indeed less painful to identify with machines than to identify with nothing.

Another example of an unhealthy coping mechanism is that people can become inflated by narcissistic dreams of self-importance, and see others as nothing but distorted reflections of themselves. This way, the world ceases to exist outside the confines of the person's narcissistic distortions. Since narcissists perceive the world as the extension of themselves, the unbearable feelings of anxiety and separateness are lulled. Or, people inflate their egos, and seek the illusion of power, by controlling and dominating other people—something that our system greatly encourages through its class and hierarchical structure.

Genuine Community Versus the Herd Mentality

All of the unhealthy mechanisms we use to avoid loneliness and the terror of anxiety can be avoided if we choose to engage in social relations that empower solidarity in ourselves and the others in our life. We can only genuinely overcome the terror of the anxiety that comes from separateness by reconnecting to the world from the strength of our independent reasoning and love. To become fully human, we must cultivate a strong sense of connection with nature and with other humans, while at the same time maintaining a separate self that can relate to the world in a loving and productive way. That is, we must develop a connection with the world through love, solidarity, and aliveness, in the context of a human community that accepts our separate and unique identity. But to do this, we need to transcend the social system fostered by capitalism; we must declare our independence from a world in which the human antagonism that comes from competitive separateness is the most accepted and valued social behavior.

Unfortunately, most people are unable to achieve that independence. As a substitute, they find their “community” in a type of symbiotic relationship with others that comes at the expense of their emotional and mental independence. This is why people in left groups follow their leaders without questioning anything. If they did not, they would be excluded from the herd, which would lead to a level of anxiety, stemming from separateness, that they could not tolerate.

How the Herd Mentality Affects the Basic Features of the Alienated Person

To become fully human, we need to transcend the security of the herd and develop our full capacity to love, to use objective reasoning, and to maintain our separate independent individuality without endangering our positive connection with others. When we cannot become fully human, we seek the security of conformity to the herd as a substitute. The only way to do this is to behave like another sheep in the herd. Very few individuals can resist this pressure. Eric Fromm was one of the few classic psychiatrists and writers who examined the psychology of the alienated person:

“The alienated person, as we have tried to describe him in this chapter, cannot be healthy. Since he experiences himself as a thing, an investment, to be manipulated by himself and by others, he is lacking in a sense of self. This lack of self creates deep anxiety. The anxiety engendered by confronting him with the abyss of nothingness is more terrifying than even the torture of hell.

“Inasmuch as we are sheep, there is no greater threat to our existence than to lose this contact with the herd and to be isolated. Right and wrong, true and false are determined by the herd. Judgment is determined by need for contact with the herd and by fear of being isolated from it.”⁴

Relationships between people in capitalism are mostly antagonistic; colloquially, a lot of people behave like assholes. But in a culture in which many people *want* to be the kind of asshole who is loaded with money, a person's negative interactions with others can give that person a sense of distorted approval and belonging. In other words, it is OK to be an asshole if everybody else is an asshole. I belong, because it is normal and expected to be an asshole who survives at the expense of others.

These kind of alienated human relations exist in all groups in capitalist society. Even leftist and socialist organizations conform to the alienated human dynamic that prevails under capitalism. When a factional fight descends upon an organization, people in both sides forget about warm feelings for friends who now stand with the other side. Thus, the loyalty to the herd—or to the subgroup to which each member is affiliated—overrides the feelings for individuals in the group. People are afraid to break with the group, and to experience the resulting separateness and anxiety. So people must hate their ex-friends—who now stand with the other side—in order to keep their sense of belonging to the group; they adopt the arguments of the leaders to maintain the approval from the group. They must believe at all cost that they have arrived at the positions argued for by the leaders through their own thinking; any doubts, any suspicion that they are dupes, will bring back the original high anxiety and separateness that drove them to join a sect or a cult to begin with.

Humans as Social Animals

It is impossible to overemphasize the need to belong to a group. It can be a small group or a large group. It can also be a “positive” belonging, in which people are encouraged to develop their independence and their humanity in a positive environment of empathy, support, and reinforcement of the best aspects of human potential.⁵ However, communities that foster the development of human potential are extremely rare under the capitalist system. Yet humans must feel part of something; and under capitalism, this something always destroys human independence, transforming humans into sheep, or cogs in the destructive system that serves the ruling elite.

This, perhaps, explains the essence of alienation in capitalism. As social animals, humans cannot avoid choosing between two alternatives. One is to find a connection with others that fosters the wisdom of being truly human. This path permits us to retain the benefits of civilization, while at the same time making it possible for us to reconnect with nature without destroying it. The alternative is to achieve “belonging” through destructive means, in which we become sheep in the herd without any ability to maintain our independence from the group. The ultimate result of the second “alternative” is that humans become so alienated, lulled, and destructive that they destroy nature—and with it, their own existence (climate change). Eric Fromm explains this beautifully:

“ . . . we human beings have lost our original oneness with nature. In order not to feel utterly isolated—which would, in fact, condemn us to insanity—we need to find a new unity: with our fellow beings and with nature. This human need for unity with others is experienced in many ways: in the symbiotic tie to mother, an idol, one's tribe, one's nation, one's class, one's religion, one's fraternity, one's professional organization. Often, of course, these ties overlap, and often they assume an ecstatic form, as among members of certain religious sects or of a lynch mob, or in the outbursts of national hysteria in the case of war.”⁶

While traditional Marxism explains the political and economic basis for reactionary counterrevolutionary movements, the Marxist theory on alienation explains in depth the fundamental *emotional* aspects of alienation under capitalism—the aspects that drive people to participate in mass killings such as wars, as well as other destructive and alienating activities. Most people cannot question their irrational adherence to the herd, because in the absence of positive support from their group, such questioning will create overwhelming anxiety. The obstacles to true humanity posed by the mountain of anxiety we must overcome, and the hard transformation we must undergo, are insurmountable for most people.

Why Adults in Capitalist Society Remain Children Emotionally

The nuclear family in capitalist society is the chief psychological agent of the capitalist class. It keeps us distracted from our humanity, and from the need for social change. The family consists of two alienated people (and their children) who are trying to survive the harsh reality of capitalism. But in the absence of a supportive community, the pressure to survive is too much to bear, **and the alienated personalities of the couple dominate their life**, resulting in constant fights and in many cases in sheer unhappiness.

The growth of the alienated adults is stunted. Thus, the parents themselves are emotionally children, that is, incapable of giving their children the truly human love that can only come from a person who *can* fully love. In most nuclear families, the crippled parents are anxious and emotionally stagnated, thus, they stunt the emotional growth of their children. Such children cannot develop as independent emotional beings, for they do not experience the basic love and support from a loving, non-alienated adult that are essential to their development, but that their parents cannot give them because they themselves have no access to a loving community.

Thus, such children do not experience genuine love that encourages independent emotional and intellectual development. **Consequently, when they grow up and become adults, they remain as anxious and insecure as little children.** Behind the adult mask, there is constant anxiety, and an angry child who cannot relate to others as an adult. As long as the adults remain emotionally children, the only kind of “love” these adults know is love that is deeply mixed with negative social feelings such as anger, fear, and anxiety. Deep inside, these child-adults feel profoundly separated from others, and their only salvation is to become the kind of people that capitalist society expects them to become: people who express their childish insecurity, anger, and anxiety through antagonistic relations with others that reflect the nature of the capitalist marketplace.

This can be seen in the culture of adult bullying. In this culture, adults who remain internally as immature as children behave like children in the schoolyard. The difference is that there is no teacher to minimize the bullying. Lately the media tells us that adult bullying in the US is running out of control. We hear stories about bullying mixed with possible racism, such as the bullying by Richie Incognito, of the American football team the Miami Dolphins, against his African-American teammate Jonathan Martin, to the pleasure and approval of the senior players. The press is now saying that such bullying, which reflects the aggression of American football, is now increasing among adults in American society and its workplaces.⁷ As the decay of American capitalism continues, the level of alienation increases, and the immature child-adult increasingly feels free to display this kind of behavior. This cycle get worse under the conditions of growing stress and competition that arise from economic instability. Hence the rising level of out-of-control bullying in “adult” society.

If we were fully mature, fully human adults, we would not be able to tolerate for a minute the constant wars, oppression, greed, cutthroat competition, suffering, and destruction of the environment and this planet that the people in power inflict on the majority around the globe. We tolerate these evils because most of us remain self-centered children, concealed inside depressed adults whose mature feelings are numbed. Ultimately, the human race is not more mature than chimpanzees that control their territories by means of violent conflict. As child-adults, we follow our father figures (the state and its leaders) into war to receive the approval and warmth of the tribe, or more accurately the nationalist hype of the modern nation. The backward population cheers for nationalist wars just the way insecure children cheer on bullies in the schoolyard.

Stalinism, the Left, and Alienation

The adoption by ostensible Marxists of political positions and ideologies that are alien to Marxism and the class struggle derives from the insecurities of a weak personality that is psychologically dependent on the approval of the group to which the person “belongs.” In bourgeois society, weaker

personalities always subordinate themselves to “stronger” personalities—that is, to personalities that better represent the social limitations of the dominant society and its pressure. Stalin represented a “stronger” personality to which to capitulate; he also represented the worst limitations and pressure of the dominant capitalist society from which Stalinism never broke.

The leaders of the Communist Party (CP) identified “father” Stalin as a symbol of the Soviet Union, elevated to idolhood to maintain the illusions of the alienated masses in the infallibility of the CP’s leaders, and to foster their power inside the mass communist parties. The emotional security of the CPers depended on their loyalty to the ideology of Stalinism, which had to be followed without questioning.

But this infantile security was achieved at the expense of feeling and thinking independently. As long as the personalities of those who claim to be communists remain alienated and weak, the socialist and communist parties provide the person with the security of the herd in a manner similar to that of any other party or cult within capitalist society.

The same pressure that corrupts and subordinates ordinary people to capitalist ideology also applies to socialists. They may well start out as genuine revolutionaries who want to get rid of the evil of capitalism. But once they attain the material privileges that come from a secure bureaucratic position, they succumb to the pressure to do whatever is necessary to maintain and consolidate their position. The privileges of bureaucracy are a magnet that serves as the fundamental factor in attracting psychologically crippled people to positions of power. This is not true only for capitalist politicians; it applies also to so-called socialists and communists, who take on the same alienated capitalistic features once in power. Being the shepherd of the herd always creates an aura of success and a distorted feeling of eminence that covers up the real impotence of the insecure alienated person. Hence the drive to obtain material privileges and power—it is an effort to compensate for the poverty of the alienated soul.

This is how Trotsky explains why worn out revolutionaries accepted Stalinism:

“But there are many revolutionaries in the party and the state who come from the masses but have long since broken away from them, and who, because of their position, are placed in a separate and distinct class. Their class instinct has evaporated. On the other hand, they lack the theoretical stability and outlook to envisage the process in its entirety. Their psychology retains many unprotected surfaces, which, with the change of circumstances, expose them to the easy penetration of foreign and hostile influences. In the days of the underground struggle, of the uprisings, and the civil war, people of this type were merely soldiers of the party. Their minds had only one string, and that sounded in harmony with the party tuning-fork. But when the tension relaxed and the nomads of the revolutions passed on to settled living, the traits of the man in the street, the sympathies and tastes of self-satisfied officials, revived in them.”⁸

Every word of this description applies to the so-called revolutionary socialists today, with the difference that with the defeat of Stalinism, their only option of gaining power is to join the bureaucracies of the trade unions.

History shows, without a doubt, that a revolutionary upheaval in itself does not change the alienated psychological features inherited from the old society. A change in human nature requires more than the hope for political and economic change that is behind revolutionary upheavals. A change in the human essence can occur only if the political/economic change also fosters a profound upheaval in the way humans relate to each other and themselves, that is, in a humanistic approach to life that overturns the old alienating capitalistic values in our heads and hearts. Such a change has to start in the revolutionary party before the revolution.

The alienated mentality certainly played a considerable role in Russia after the October Revolution started to fade, contributing to the rise of Stalin and the monstrous Stalinist bureaucracy to power in the Soviet Union. I do not minimize the validity and importance of the classic explanation for the rise of the Stalinist bureaucracy as outlined by Leon Trotsky in the book *The Revolution Betrayed*. Trotsky

explained how years of war against the Western powers, the White Army, and the Mensheviks caused the destruction of industry, infrastructure, and agriculture—thus creating the conditions that enabled a bureaucracy to rise to power. He also explained how the rise of the bureaucracy stemmed from the exhaustion of the workers' movement in the Soviet Union, as well as the defeats experienced by the revolutionary movement in Europe. The defeat of the European revolutions, and the German revolution in particular, resulted in the isolation of the Soviet Union, thus encouraging the rise of a chauvinistic bureaucracy that proclaimed that socialism was centered in its backyard (in one country).

Under these conditions of exhaustion, defeat, and isolation, conformist psychology became a dominant feature in those who claimed to be revolutionists. That became particularly true after Stalinism came to power. The strengthening of the alienated personality was expressed by the tendency to abandon independent critical thinking, and to adhere to the herd by giving blind support to the CP that held state power. This remained the case even while the Stalinist bureaucracy was establishing a brutal dictatorship to protect its material privileges; and even when Stalin was carrying out widespread executions of all the Bolshevik cadres, to ensure that the process of bureaucratization would not be disrupted by the slightest memory of the past.

It is critical to link the standard Marxist explanation for the rise of Stalinism to Marxist theory on alienation. When Stalinism took hold in the Soviet Union, the thousands of CP leaders throughout the world suffered from many of the weaknesses of alienated individuals in capitalist society. Like most people, they could not stand on their own two feet. Thus, they were too weak to withstand the pressure to conform to the “revolutionary” communist herd. They could not think independently and face the isolation of being a minority, ostracized from the mainstream “revolutionary” movement that in these days was led by the Communist Party. Hence, their inability to transcend alienation led to their subordination to Stalin.

Indeed, this emotional immaturity can be traced to the conduct of key Bolshevik leaders even in the period before Stalin rose to power. In his books *History of the Russian Revolution* and *My Life*, Trotsky examined the psychological weaknesses of the most important Bolshevik leaders—weaknesses that led them to take opportunistic positions before the Russian Revolution, and to capitulation to Stalin afterwards. While Trotsky's work does not provide a full analysis of the interaction between the psychology of these leaders and the objective development and retreat of the 1917 revolution, his insights are nevertheless quite revealing.

Two of the key Bolshevik leaders were Kamenev and Zinoviev. This is what Trotsky wrote about Kamenev:

“Although a Bolshevik almost from the very birth of Bolshevism, Kamenev had always stood on the right flank of the party. Not without theoretical foundation or political instinct, and with a large experience of factional struggle in Russia and a store of political observations made in Western Europe, Kamenev grasped better than most Bolsheviks the general ideas of Lenin, but he grasped them only in order to give them the mildest possible interpretation in practice. You could not expect from him either independence of judgment or initiative in action. A distinguished propagandist, orator, journalist, not brilliant but thoughtful, Kamenev was especially valuable for negotiations with other parties and reconnoitres in other social circles—although from such excursions he always brought back with him a bit of some mood alien to the party. These characteristics of Kamenev were so obvious that almost nobody ever misjudged him as a political figure. Sukhanov remarks in him an absence of ‘sharp corners.’ ‘It is always necessary to lead him on a tow line,’ he says. ‘He may resist a little, but not strongly.’”⁹

In other words, an opportunistic political character that impels one to dilute political principles can always be traced to a weakness in the fundamental personality—to the inability to withstand social pressure and maintain independent thinking and initiative; it can be traced to the fear of being ostracized, and of being alone, without the support of the party apparatus. It is always the case that when a person has

a weak core, that person does not have a real nourishing connection to him/herself and to his/her closest friends and comrades. In such a case, political leaders, including the best Marxists and socialists, cannot withstand the adverse pressure that is used to undermine the defense of major political principles. When such pressure arrives, weak leaders will be driven to embrace the prevailing views of their social milieu. In the case of Kamenev and many other Bolshevik and Communist Party leaders, this meant an abandonment of independent thinking and principles, which were exchanged for the security of the herd, that is to say, of the Stalinist bureaucracy.

Zinoviev's opportunism was not as straightforward as Kamenev's. Trotsky explains that on a superficial level his character seems to contain the opposite attributes to Kamenev's political identity:

“Where Kamenev was a propagandist populariser, Zinoviev was an agitator, and indeed, to quote an expression of Lenin, ‘nothing but an agitator.’ ... Lacking inner discipline, his mind is completely incapable of theoretical work, and his thoughts dissolve into the formless intuitions of the agitator. Thanks to an exceptionally quick scent, he can catch out of the air whatever formulas are necessary for him—those which will exercise the most effective influence on the masses. ... Although far more bold and unbridled in agitation than any other Bolshevik, Zinoviev is even less capable than Kamenev of revolutionary initiative. He is, like all demagogues, indecisive.”¹⁰

Zinoviev's capitulation to the social pressure of Stalinism and the Communist Party can be traced to his demagogic character, and in particular, to the demagogue's symbiotic relationship to others in general. The demagogue *needs* the cheers and approval of the people in the street to feel that he is achieving unity with others and overcoming the pain of separateness. But underneath his ostensible self-confidence rules the anxiety of the insecure person who cannot think clearly and independently. The thoughts of the subjective demagogue do not come from the ability to assess the objective situation, but from the gut feelings of the ego that knows how to say the right things to elicit the caresses of a crowd under the control of demagogic manipulation.

Kamenev and Zinoviev did not capitulate to Stalin overnight. They went back and forth between Trotsky's Left Opposition and Stalinism until 1926, when they finally capitulated to Stalinism because it was clear that Trotsky was losing. They could not withstand either the pressure of being in a small minority or the impact of banishment from the party's social milieu. In their case, resistance against the Stalinists was also tantamount to risking their lives.

These days, when there is a dispute or a “debate” within the Left, the leaders use the same techniques employed by bourgeois demagogues. I have seen demagogic techniques used on a regular basis during public meetings, by both big and small reformist and centrist leaders. For example, our organization, HWRS, recently criticized a famous leftist in the Bay Area, Jack Heyman, for caving in to the BART union bureaucracy, and in particular to union bureaucrat Chris Finn, during a recent BART strike. Heyman, a retired activist in Local 10 of the ILWU, is the leader of a pro-union organization called the Transportation Workers Solidarity Committee (TWSC). Heyman's capitulation was particularly gross because Heyman made deals with Finn even though Finn was the spokesperson chosen by the union bureaucracy to announce during the negotiations that the union leaders were willing to have unresolved issues with management decided by binding arbitration.

Because of the deal that Heyman made with Finn, the unions allowed progressive speakers to speak at a pro-union rally. But the price was that the TWSC held back from making any sharp, meaningful criticism of the union leaders in the days leading up to the strike. Even during the brief strike, TWSC wrote nothing critical of the bureaucracy.

At a TWSC-sponsored forum after the strike,¹¹ which HWRS attended, we criticized Heyman for TWSC's failure to throw its full weight behind important issues such as the need for inter-union, rank-and-file strike committees. Yet Heyman defended the TWSC's decision to bloc with the union leadership, even when the bureaucracy was betraying the workers in the days before and during the strike. He went

on to criticize HWRS for doing what he *claimed*—in the unclear and misleading fashion typical of demagogues—was the same thing. What Heyman referred to was HWRS’s action in going to an ILWU Local 10 Executive Board meeting, which was attended (per normal ILWU practice) by about 30 rank-and-file members. We went to the meeting to seek support from ILWU members in the efforts of Labor, Black & Brown (a coalition in which HWRS participates) to defend a black family from harassment by the police who had murdered their son. Heyman noted that the current ILWU president had told Local 10 members to cross the truckers’ picket lines at the Port of Oakland, a betrayal that Heyman had (correctly) denounced.

By comparing HWRS’s intervention at a union meeting chaired by that same president to the TWSC’s bloc with the leadership of the BART unions, Heyman implied that HWRS, like the TWSC, had made a deal with a corrupt union official who undermined the principles of the class struggle. But the only “deal” HWRS made with the ILWU president was to get his permission to come to the Executive Board meeting *in order to seek support from the rank and file*. HWRS gave up nothing in exchange for this permission; in particular, we neither agreed nor intended to soft-pedal any criticisms of the Local 10 bureaucracy. Thus, the demagogue Heyman deliberately glossed over the fundamental difference between capitulating to a traitorous union bureaucrat by not criticizing him for betraying a strike, and asking a union leader for permission to appeal directly to the rank-and-file members for help in defending a black family against police brutality!

Most self-proclaimed revolutionary organizations are led by manipulators and demagogues. They exploit the weaknesses of their group’s emotionally crippled members to manipulate them into their path of politics and control. The sad bottom line is that the alienated dynamic within left parties/organizations explains why they sabotage revolutionary efforts, and why the so-called movement confines itself to capitalist ideology and practice. Underneath the exterior of “revolutionary” or “socialist” ideology lies the real social/psychological structure of the left/socialist group. The social/psychological structure in these groups is not very different than the social/psychological structure in the rest of society. Most of the top leaders in the parties, who have never dealt with their own alienation from their humanity, act like bourgeois politicians. They are driven by the passion for power that is triggered by the impotency of their ego, and by their failure to be compassionate, loving individuals. They feel that they have to dominate and manipulate other people for their political gain, and they use the theory of socialism and Marxism in a demagogic and manipulative fashion, that is, to make the members of the group dependent on them. In the hands of such leaders, socialism and Marxism have little to do with scientific objective thinking and practice.

Given these psychological features of the vast majority of self-identified “socialists,” it is impossible to engage them in an objective dialogue that could lead to the narrowing of differences and to unity in the struggle against capitalism. Instead, the demagogic and manipulative leaders take advantage of the members’ emotional insecurities to sabotage any such discussion. The members’ insecurity creates a need to be loyal to the herd so as not to lose touch with it. Because of this need, the members are easily encouraged to view other socialists and progressive people who do not share the precise ideology of their group with deep hostility. Because the emotional security of the members shackles them to the security of their specific herd, they close their minds to the views of others, and cannot make an objective assessment of the merits of another group’s position.

In the atmosphere created by this infantile mentality, political meetings and mobilizations against the common capitalist enemy often become bickering sessions. The egos of the parties involved are more important than a genuine dialogue to achieve clarity and unity in action, so no one is willing to admit a mistake, or agree that an “opponent” has a good position. (For an example, see our article on the BART strike and the TWSC, forthcoming in *International Trotskyist*, Winter-Spring 2014.)

Most members of these groups cannot maintain any psychological separation between their opinion of the political line of the group and their emotional dependence on the sense of belonging that they derive

from their association with the group. This is just one example of the ways in which the alienated person is not capable of objective thinking. The political positions of most members of self-identified socialist groups are not generally arrived at through independent and objective reasoning. The people in such organizations and parties are internally weak, insecure, and unable to relate to each other in a loving and humanistic way. *The internal psychological life of groups in the socialist and progressive movement is not different from that of other groups in bourgeois society*: relationships are generally based on the establishment of cliques; interpersonal friction; suspicion; bickering; subjective likes and dislikes; and alienated hostility between people—all of which bolster the ability of the real enemy to penetrate and manipulate the movement.

By objective discussion, I mean a real dialogue in which people really listen, errors are admitted, and political positions are assessed on the basis of objective reasoning. When this takes place, common experience in action, combined with dialogue, can lead to the narrowing of differences and to fusions among groups and parties that are moving to the left. In general, objective discussion and common experience can lead to the enrichment of socialist ideology, and to a higher unity of all the parties and groups who want to fight against the system. But with alienated personalities dominating the progressive movement and the left, it is almost impossible for groups to engage in the kind of mutual objective discussion and joint practice that leads to genuine learning and the improvement of our tactics and actions against the main enemy. Instead, any effort to engage in dialogue quickly degenerates into irrational and thoroughly subjective debate.

This is reflected in the way the so-called movement functions. Opposition to the main line of thinking, however bankrupt, is not tolerated. The Stalinist method of functioning is widespread, and the “movement” tolerates only useless, reformist courses of action, restricting itself to organizing yet another demonstration and rally, while the numbers in attendance dwindle and the capitalist enemy continues to strengthen. In today’s “movement,” genuinely revolutionary positions that threaten reformism and the herd mentality are excluded from consideration, and anyone who advocates them is banned from further participation. (See our Open Letter to the TWSC, forthcoming in *International Trotskyist*, Winter-Spring 2014.)

This sickness is connected to the political and theoretical bankruptcy of the “movement.” The reader can see an example of this in our article on the method of the opportunist left regarding the civil war in Syria.¹² Positions such as supporting the Islamists in Syria, who massacre people as they are trying to establish an Islamist dictatorship in Syria, that were unthinkable few decades ago are tolerated these days. Some of those who are advocating such positions were in our organization and they left the organization without any political discussions. Instead they use personal insults, rumors, and bickering as the sole substitute for dialogue. But there is nothing new in this. The so-called movement has been functioning as bourgeois politicians for decades.

The Magnitude of the Impact of Climate Change

We now turn to the topic of climate change. Before discussing how alienation affects our ability to fight against this threat, it is important to understand the full extent of the future catastrophe that climate change is likely to cause, calling into question the very survival of our planetary ecosystem, and with it, all of humanity.

As time has progressed since the danger of climate change was first recognized, the picture has become increasingly bleak. Since I am not a climate scientist, I will let the scientists do most of the talking in this chapter. Retired University of Arizona professor Guy McPherson, who is an honest climate scientist, tells it as it is. Here is his list documenting how mainstream scientists have had to modify their predictions over the past several years regarding the magnitude of expected increases in global average temperatures:

“Intergovernmental Panel on Climate Change (late 2007): 1 C by 2100
Hadley Centre for Meteorological Research (late 2008): 2 C by 2100
United Nations Environment Programme (mid 2009): 3.5 C by 2100
Hadley Centre for Meteorological Research (October 2009): 4 C by 2060
Global Carbon Project, Copenhagen Diagnosis (November 2009): 6 C, 7 C by 2100
International Energy Agency (November 2010): 3.5 C by 2035
United Nations Environment Programme (December 2010): up to 5 C by 2050.”¹³

As McPherson explains, “An increasing number of scientists agree that warming of 4 to 6 C causes a dead planet. And, they go on to say, we’ll be there by 2060. The ultra-conservative International Energy Agency, on the other hand, concludes that, ‘coal will nearly overtake oil as the dominant energy source by 2017. ... [W]ithout a major shift away from coal, average global temperatures could rise by 6 degrees Celsius by 2050, leading to devastating climate change.’”¹⁴ McPherson adds that “These assessments fail to account for significant self-reinforcing [positive] feedback loops.”¹⁵ Yet by now, most climate scientists agree that an increase in global average temperature of between 3.5 and 6 C will trigger positive feedback loops that could be catastrophic for all life on the planet.

By positive feedback loops, scientists mean the self-reinforcing strengthening or amplification of a phenomenon. For example, when the ice that covers the oceans near the poles melts, that opens up larger areas of open water, which are darker in color and therefore absorb more solar heat. This, in turn, increases the temperature of the ocean water, which makes more ice melt, which in turn causes a further increase in water temperature, and so on.

Another example is what is happening to phytoplankton, the plant form of plankton, the tiniest organism in the oceans. Phytoplankton, like other plants, consume carbon dioxide and generate oxygen. Phytoplankton were what originally made oxygen abundant and life possible. But because of both ocean warming¹⁶ and the ocean acidification caused by high levels of atmospheric carbon dioxide,¹⁷ phytoplankton is being destroyed: the total amount of phytoplankton has fallen more than 40% since 1950. As ocean warming and acidification continue at an escalating rate, so does phytoplankton’s destruction. Less phytoplankton means that less carbon dioxide is consumed, and this in turn contributes to global warming and ocean acidification.

In explaining what positive feedback loops mean, McPherson makes no secret of the fact that their effect will be to increase climate change exponentially, with unthinkably catastrophic effects. Take, for example, the positive feedback loop involved in ocean acidification from climate change. McPherson observes: “Ocean acidification associated with increased atmospheric carbon dioxide is proceeding at an unprecedented rate ... capable of triggering mass extinction by itself.” He adds that “atmospheric oxygen levels are dropping to levels considered dangerous for humans.”¹⁸

Just the acidification of the oceans, by itself, is enough to wipe out life on this planet. According to Andy Ridgwell, a geographical sciences professor at the University of Bristol, the acidification of the ocean today is proceeding on a greater and faster basis than anything geologists can find in the fossil record over the past 65 million years. “This is an almost unprecedented geological event,” Ridgwell says.¹⁹ **And this is just one aspect of the positive feedback loops involved in climate change.**

Another example of a positive feedback loop is the release to the atmosphere of a methane—a gas whose effect on global warming is 23 times more powerful than CO₂ over the course of a century, and even worse in the short term of about 10 years—nearly 100 times more powerful and destructive.

Deposits of methane cover a huge area of the planet. For example, it lies frozen under the surface in Siberia, where it is literally ready to explode into the atmosphere as the ice thaws. Many riverbanks and wet forests also hold a huge amount of methane under the surface, and research has found a large sub-sea permafrost methane reservoir under the East Siberian Arctic Shelf, from which methane is escaping to the

atmosphere. In March 2010, the National Science Foundation warned that “Release of even a fraction of the methane stored in the shelf could trigger abrupt climate warming.”²⁰

But this is only part of the methane that is ready to rise to the atmosphere. The ocean floors that cover most of the world are loaded with vast amounts of methane. The Arctic Ocean is warming fast, and “[t]he Arctic summer sea ice has now passed its tipping point to meltdown, having shifted to a new climate pattern where ‘normal’ has become obsolete.”²¹ This melting results in an increasing amount of methane being released into the air as frozen deposits thaw. In some areas in the Arctic, putting a lit match to the surface causes large areas to burst into flame because of the escaping bubbles of methane.²² Areas where methane seeps from the ocean floor may also contribute to such releases; in 2012, one such “seep” was discovered about 20 miles from shore near San Diego, CA.²³

The increase in methane is particularly alarming because methane is one of the main gases involved in causing the mass extinction that took place at the end of the Permian Period. As summarized by Cory Morningstar, an independent investigative journalist, writer, and environmental activist: “The end of the Permian Period, which happened 250 million years ago, was the greatest extinction event in the history of life. More than 90% of the species in existence perished. The end-Permian event was accompanied by a temperature rise of as little as 6°C. Life took 50 million years to recover the diversity that had existed prior to this mass extinction.”²⁴

As scientists currently understand it, the mechanism that caused the end-Permian extinction is as follows. First, a massive release of volcanic ash from eruptions in Siberia caused huge increase in the atmospheric level of carbon dioxide. This raised the temperature about 4-5 C, which caused a massive destruction of life on the land. Then, as a result of the temperature increase, the oceans released massive amounts of methane into the atmosphere. This caused a further temperature increase of about 10 C, which killed off most of the remaining life, both on the land and in the ocean.

This is really frightening. Remember, mainstream scientists are now predicting a global temperature rise of 4 to 6 C by the end of the present century! **A rise in temperature of about the same magnitude was what kicked off the killing of 95% of life at the end of the Permian Period!** What is even more frightening is that we are talking about a rise of 4- 6 C within a period of *decades*, or at most a couple of hundred years. In contrast, at the end of the Permian Period, it took the natural process *40,000 years* to achieve a temperature increase of this magnitude. In other words, because of the rapidity with which anthropogenic (human-caused) temperature increases are occurring, coupled with the speed-up effect of positive feedback loops, capitalism is replicating in an extremely condensed time frame a natural process that took tens of thousands of years. The pace of the current temperature rise could make the catastrophe at the end of the Permian Period look mild compared to the potential catastrophe we face today. The evolutionary process that allowed a few species to adapt to the changes in their environment and survive the end-Permian extinction *cannot occur quickly enough* to keep up with the accelerated pace of the current anthropogenic climate change.

The effect of condensing such huge changes into such an extremely short period may, in fact, have effects so dramatic that no scientist or computer model can begin to comprehend them, much less predict them with accuracy. But scientists’ informed speculations are terrifying. In a paper entitled *Methane-driven oceanic eruptions and mass extinctions*, Gregory Ryskin, associate professor of chemical and biological engineering at Northwestern University, paints the following picture of what could happen:

“The consequences of a methane-driven oceanic eruption for marine and terrestrial life are likely to be catastrophic. Figuratively speaking, the erupting region ‘boils over,’ ejecting a large amount of methane and other gases (e.g., CO₂, H₂S) into the atmosphere, and flooding large areas of land. Whereas pure methane is lighter than air, methane loaded with water droplets is much heavier, and thus spreads over the land, mixing with air in the process (and losing water as rain). The air-methane mixture is explosive at methane concentrations between 5% and 15%; as such mixtures form in different locations near the ground and are ignited by lightning, explosions and

conflagrations destroy most of the terrestrial life, and also produce great amounts of smoke and of carbon dioxide. Firestorms carry smoke and dust into the upper atmosphere, where they may remain for several years.”²⁵

In other words, if the dormant methane in land and the ocean wakes up and rises into the atmosphere, it is bye-bye to civilization, and most likely to most of the natural world, as nearly all living things are burned or suffocated by the fires and the gases in the atmosphere.

The end-Permian event is not the only mass extinction in Earth’s history. Mass extinction due to climate change has occurred several times on this planet, most recently some 55 million years ago. Morningstar gives us a fascinating picture of how the positive feedback loop mechanism operated during that event.

“During the Paleocene-Eocene Thermal Maximum (PETM) extinction event that took place 55 million years ago, the oceans were warming just as they are today. The 2001 documentary ‘The Day the Oceans Boiled’ examined what was new evidence in 1999. . . Scientists had discovered that the expected rise in global temperature in the near future could be only the start of a much greater increase. The evidence uncovered warned that our Earth’s temperature could rise by 20 degrees within the next three generations. The documentary follows scientists uncovering evidence for what caused massive, abrupt climate shifts that happened 55 million years ago. This was the last time the Earth’s temperature accelerated quickly, causing many animals to shrink, with horses becoming the size of modern domestic cats. It took the planet 60,000 years to cool down again. Sediment samples drilled from the ocean sea floor provide scientists with the ability to uncover what took place in our Earth’s history hundreds of millions of years ago.

“In 1999, Santo Bains of Oxford University’s Department of Earth Sciences was looking for clues as to what happened 55 million years ago during the Paleocene-Eocene. In particular, he was interested in one specific sediment core named core 690. Core 690 was to have the most detailed record of the Paleocene-Eocene climate change event. Bains took one sediment sample per centimeter of the entire core 690. Buried in the sludge along the bottom of the sea there are stories of the past. Within this sediment there are tiny sea creatures—deep-ocean microscopic foraminifera—that survived the asteroids that killed the dinosaurs. However, 55 million years ago, half of the tiny forams went extinct. Locked in their shells lies the story of why. As their shells were made of the carbon dioxide dissolved in the sea, their detailed composition revealed both the levels of CO₂ in the atmosphere and the water temperature at the time of extinction. . .

“Bains’s scientific analysis confirmed that at the time the mammals shrank, the atmospheric carbon levels had suddenly risen abruptly—causing a rapid warming of ocean waters. As he examined more samples, Bains discovered something extraordinary. There was not just one sudden rise in temperature. There were three. **Temperatures accelerated dramatically in three succinct steps over a period of just a few hundred years for a total temperature increase of approximately 8°C.** The rise in atmospheric carbon was just as dramatic. The jumps in Bains’s graph add up to one and a half trillion tonnes of carbon. His discovery was the first time this was recognized in the geological record. Where did all of the carbon come from? Methane hydrates are believed to be the only explanation. Methane hydrates quickly decomposed, releasing vast amounts of carbon into the oceans and into the atmosphere.

“Bain’s research suggests that prior to the extinction, a massive release of methane caused a severe feedback [loop], which then resulted in a second immense methane release. The second release caused an even greater amplifying effect, thereby causing a severe third release, which finally resulted in a runaway greenhouse event of mass extinction.”²⁶

What is really disturbing about the mass extinction 55 million years ago is the assertion by climate scientist James Hansen that “humanity is putting carbon dioxide into the atmosphere today at a rate that is

10,000 times higher than the rate during the extinction event of 55 million years ago.”²⁷ James Hansen is a renowned NASA scientist, who would not make such a claim without adequate research data to back them up.²⁸

In short, it is clear that the positive feedback loops are accelerating very fast. It is likely that the feedback loop mechanism has **already reached the tipping point**, or point of no return. This means that the process leading to an extremity of climate change that could be catastrophic to life and the planet is already totally out of control, and **could not be reversed even if we halted all release of carbon dioxide immediately**.

It is beyond the scope of this article to undertake an exhaustive analysis of the positive feedback loops that have already been set in motion. The following list includes the most important feedback loop mechanisms, with links to key information about them.²⁹

1. Methane hydrates are bubbling out of the Arctic Ocean. (*Science*, March 2010³⁰)
2. Warm Atlantic water is defrosting the Arctic as it shoots through the Fram Strait. (*Science*, January 2011³¹)
3. Siberian methane vents have increased in size from less than a meter across in the summer of 2010 to about a kilometer across in 2011. (*Tellus*, February 2011³²)
4. In 2010, fires caused by drought in the Amazon triggered the release of more carbon than industrial activity in the United States. (*Science*, February 2011) (“Using an innovative satellite technique, NASA scientists have determined that a previously unmapped type of wildfire in the Amazon rainforest is responsible for destroying several times more forest than has been lost through deforestation in recent years. ... In years with the most understory fire activity, such as 2005, 2007 and 2010, the area of forest affected by understory fires was several times greater than the area of deforestation for expansion of agriculture. ... The study goes further and fingers climate conditions—not deforestation—as the most important factor in determining fire risk in the Amazon at a regional scale.”)
5. Peat in the world’s boreal forests is decomposing at an astonishing rate. (*Nature Communications*, November 2011)
6. Methane is being released from the Antarctic, too—over ten tens more carbon than parts of the Arctic. (*Nature*, August 2012³³)
7. Russian forest and bog fires, which release massive amounts of carbon dioxide into the air, are growing. (NASA, August 2012³⁴)
8. The cracking of glaciers accelerates in the presence of increased carbon dioxide. (*Journal of Physics D: Applied Physics*, October 2012³⁵)
9. The Beaufort Gyre, an Arctic Ocean current that plays a significant role in regulating our climate, has apparently reversed course. (U.S. National Snow and Ice Data Center, October 2012³⁶)
10. Exposure to sunlight increases bacterial conversion of exposed soil carbon, thus accelerating thawing of the permafrost. (Proceedings of the National Academy of Sciences, February 2013³⁷)
11. Summer ice melt in Antarctica in the 2012-2013 season was at the highest level in 1,000 years, and the most rapid melting has occurred in the last 50 years (*Nature Geoscience*, April 2013³⁸)
12. The disappearance of top predators accelerates CO2 emissions (*Nature Geoscience*, Feb 2013³⁹) (“We knew that predators shaped ecosystems by affecting the abundance of other plants and animals but now we know that their impact extends all the way down to the biogeochemical level.”)

The situation has become so bleak that even the bourgeois media can no longer ignore it. In November 2013, Typhoon Haiyan (Yolanda), considered one of the biggest if not the biggest in recorded

history, hit the Philippines with a record-breaking impact, leveling towns, killing tens of thousands, and destroying the homes and livelihoods of some 4 million people. In its wake, mainstream sources such as *Scientific American* and Public Radio International reported that climate change is likely to make storms of this magnitude increasingly frequent.⁴⁰ At the same time, the press reported that 2013 was the driest year in recorded California history.⁴¹

An article published on September 2, 2013, in one of the most mainstream of capitalist publications, the *San Francisco Chronicle*, included the following list of many other types of destruction being inflicted on the environment by capitalist society—climate change among them—threaten to doom life in our planet:

“The United States is expected to grow from 313 million people to 400 million. Economies have expanded many times faster, vastly increasing consumption of goods and services in rich and developing countries. ‘The combination of climate change and 9 billion people to me is one that is just fraught with potential catastrophes,’ said John Harte, a UC Berkeley ecosystem scientist.

“‘The evidence that humans are damaging their ecological life-support system is overwhelming,’ said the report by the Millennium Alliance for Humanity and the Biosphere at Stanford. ‘By the time today’s children reach middle age, it is extremely likely that the Earth’s life-support systems, critical for human prosperity and existence, will be irretrievably damaged.’ ...

“Residues from 100 million tons of synthetic chemical compounds produced each year are so pervasive that they commonly appear in polar bear tissues, whale blubber and the umbilical cords of babies. ...

“Humans have converted more than 40 percent of the earth’s land to cities or farms. Roads and structures fragment most of the rest.

“Humans appropriate more than half the world’s fresh water. Ancient aquifers in the world’s bread baskets, including the Ogallala in the Great Plains, are being drained.

“Only 2 percent of major U.S. rivers run unimpeded. California’s Sacramento-San Joaquin River Delta has been entirely re-engineered. The last time the Colorado River reached the Sea of Cortez was in 1998. The Nile, Indus and Ganges rivers have been reduced to a trickle.

“Humans surpass nature as a source of nitrogen emissions, altering the planet’s nitrogen cycle.

“A quarter of known mammal species, 43 percent of amphibians, 29 percent of reptiles and 14 percent of birds are threatened. African elephants may be extinct within a decade.

“A third of world fisheries are exhausted or degraded. Forty percent of coral reefs and a third of mangroves have been destroyed or degraded. Most species of predator fish are in decline.

“Ocean acidification, a product of fossil fuel burning, is dissolving calcifying plankton at the base of the food chain.

“A garbage gyre at least twice the size of Texas swirls in the Pacific Ocean.

“‘We’re changing the ability of the planet to provide food and water,’ Harte said.”⁴²

The article also points out that the current size of Earth’s human population is unprecedentedly large, exceeding 7 billion people. Because the Earth’s natural resources are already strained by trying to meet the needs of so many, significant climate change will cause havoc for the human species. Even moderate climate change will kill off millions, if not billions, of people, through thirst, starvation, disease, and wars on an unprecedented scale. Indeed, severe climate change may well bring about the total collapse of civilization, reducing the remaining human population to a handful of isolated communities struggling to survive with minimal natural and technological resources.

Just before this article went to press, another article rich with data on climate change, entitled “Are We Falling Off the Climate Precipice?” appeared on the website *Nation of Change*.⁴³ The article includes some of the most recent scientific data on climate change. It portrays an even bleaker picture than I have described above. I recommend this article to the reader who is not afraid to face depressing facts squarely.

How Alienation Blocks the Formation of a Mass Response to Climate Change

Taking into serious account all of the factors that, interacting dialectically, threaten to bring about unprecedented climate change and cause one of the biggest mass extinctions in Earth’s history, the only reasonable response, one would think, would be for everyone who is aware of the situation to forget about their personal lives and **immediately** start a crusade to stop capitalism’s assault on nature and the entire planet. Since the ruling class is willing, at best, to make small, gradual cuts in the rate at which harmful gases are being released into the atmosphere, even the most cautious approach requires the overthrow of capitalism as the first step to the planet’s recovery.

In fact, millions of people *are* fully aware that if we do not do everything we can, immediately, to reduce as much as possible all of the factors that are causing climate change, capitalist “civilization” will be destroyed, and our planet will be doomed to remain almost (or entirely) lifeless for thousands—possibly millions—of years. Yet so far, the so-called socialist and progressive movements—those who actively struggle against capitalism and its evils—have only managed to mobilize a pathetically small number of people to protest actively against climate change and the destruction of the environment. These same leftists and progressives can easily mobilize hundreds of thousands to demonstrate when the US invades yet another country. Thus, the question arises: why is the left movement seemingly paralyzed when it comes to organizing against climate change, even though it threatens to kill millions if not billions of people, including the leftists’ own children and grandchildren?

Very few people in the media have thought even to ask this question, much less to propose an answer. One of them is Tom Engelhardt, founder of the left-liberal TomDispatch website (<http://www.tomdispatch.com/>), an affiliate of *The Nation*. While participating in a February 2013 demonstration against the Keystone XL Pipeline, Engelhardt was very surprised about how small the demonstration turned out to be. He wrote afterwards: “So I continue to wonder, given our situation on this planet, given our future and that of our children and grandchildren, where is everybody?”⁴⁴

Engelhardt did not make any serious attempt to answer his own question. He blamed the lackluster showing on such factors as lack of outreach by the organizers; right-wing denialist propaganda; the difficulty of coming to terms with a complex scientific analysis; and the lack of a single clear target against which to struggle. His inability to achieve a better answer to his own very good question reflects his failure to grasp of the dialectical method. A dialectical analysis of the issue takes into account the state of the anti-capitalist movement, the demoralization of the labor movement and the working class, and the dramatic effects of alienation. Engelhardt’s article points out the powerful ability of the capitalist media to brainwash us, and hide the truth. This provides part of the answer, a part that we cannot change without overthrowing capitalism. But it misses the critical element, which is also a product of capitalism: the profound effect of alienation, which is what keeps us “safe” at home, watching junk on TV, instead of flooding the streets to demand an immediate, all-out effort to reduce the severity of climate change and prepare for its effects.

Engelhardt’s essay reflects the confusion of the petty bourgeois liberal who does not see (or does not want to see) the elephant in the room: capitalism, and the need to overthrow it and institute a collective society that will focus on generating clean energy to replace the crude capitalistic methods that release greenhouse gases and pollute the planet. Nonetheless, he asks some of the right questions, and even offers the beginning of the solution: “The real issue here is how to make climate change personal in a way that doesn’t simply cause us to shut down.”⁴⁵

The “shutting down” to which Engelhardt refers is nothing other than alienation. Engelhardt is able to see that **that overcoming alienation is necessary in order for us to feel the urgency of fighting climate change**. The next question, which Engelhardt does not really ask, much less answer, is *why* we are so alienated, to the point that we do not feel the urgency of fighting climate change.

This is a critical question for historical materialists. We live in a period of historical defeats and demoralizations for the working class and its allies. In 2012, the bourgeoisie in Michigan was able to enact “right to work” legislation, in the very state where the historic battle to unionize Detroit’s auto factories kicked off the era of industrial union power in the US.⁴⁶ With this act, the bosses put the last nail in the coffin of strong and combative industrial unions. By now, most of the unions in the US have become company unions, and without the support of a militant labor movement behind them, the few remaining holdouts will likely soon fall. The historical defeat of the organized labor movement in the US, combined with the defeat of the youth and unemployed movement, marked by the brutal nationwide assaults on the Occupy movement (which then put the tail in between its legs and folded), have resulted in a deep demoralization across the ranks of the progressive activists. The hundreds of thousands who cheered on Occupy in its heyday have lost their will to fight the evils of the capitalist system, and every fresh round of defeats only makes them even more alienated and numbed.

In times like these, people from the petty bourgeoisie and the working class tend to focus narrowly on their own survival. The standard of living of workers and the petty bourgeois in the US has dramatically deteriorated, as they have suffered one defeat after another. In their “free” time, even those who are aware of the consequences of climate change are hooked on Facebook and the zillions of other distractions provided by sophisticated capitalist entertainment. **But people who allow themselves to be numbed in this way lose their humanity.** And without our humanity, we cannot fight climate change and tyranny, as we become, more and more, anxious commodities in the labor and entertainment markets, with nowhere to go outside of our meaningless existence.

We live in a society of zombies, in which individuals are numbed and alienated to the point that they passively accept the prospect of the death of the human race and most other species on planet Earth. This is illustrated by the way we are reacting (or rather, not reacting) to the scientists’ conclusions that we are in the midst of the sixth great extinction on our planet. It is clear that even if a remnant of humanity manages to outlive the coming mass extinctions, they will continue to survive only with great difficulty. The processes that led to previous extinctions leave no doubt about this, and scientists tell us that the imminent mass extinction will not be very different from those in the past. Yet there are no mass uprisings against the coming cataclysm, or against its root cause, the capitalist system. People treat it at best as another “interesting” topic for dinner conversation. They lament the potential extinction of the magnificent elephants, tigers, and polar bears. But life in our alienated society goes on. The grandchildren of the American petty bourgeoisie may not be able to see the elephants when they visit Africa, but as long as there are more organic restaurants in the big cities, life is good.

It is hard to predict how the petty bourgeoisie will react when they find out that their sushi from the Pacific Ocean is becoming radioactive in the wake of the Fukushima nuclear disaster. But we know that they will not put aside their routine pursuits and march in the streets, even to stop the potential extinction of all life, including their own species. People are too alienated from life and from themselves to start a worldwide uprising against climate change. Capitalism brainwashes us and make us believe that our self-centeredness and greed are more important than life, the health of the planet, and the survival of humanity. An egalitarian, sustainable human society has no chance to develop as long as this continues to be the case.

The fact that millions of people who know about the danger to life and the human race have nonetheless decided to do nothing about it can only be explained by understanding that capitalism has alienated humans from themselves to the point that they do not care about the survival of their species. Scientists are continually publishing ever more dire warnings about climate change, yet capitalism

obviously is doing little or nothing to stop it. Thus, it is becoming less and less believable that we can change things just by pressuring capitalism to reform: to halt oil production, to eliminate greenhouse gas emissions, and to refrain from all its other climate-changing activities that reap huge profits. In order to continue to believe that climate change can be ameliorated without overthrowing capitalism, the reformists have to keep becoming increasingly alienated from the truth and from their own humanity. Those millions who are aware of the destructive potential of climate change are having a harder and harder time persuading themselves that they can successfully pressure capitalist politicians to do something about climate change. They are forced to fall back on the excuse that they are too tired and overworked to do more to stop climate change than recycling, buying a Prius or Tesla, and installing solar panels on their roofs. The sad truth is that as time progresses this excuse is becoming more and more monstrous.

Meanwhile, the ostensibly anti-capitalist left is doing nothing to mobilize, and hardly even writes about climate change. Unlike the petty bourgeoisie, the left has no excuses. Its passivity simply reflects its bankrupt politics and method.

We Cannot Build the Revolutionary Party Without Overcoming Alienation

It should be clear from the foregoing discussion that those who want to fight climate change in the only effective way—by overturning the capitalist system—cannot restrict their efforts to economic and political questions. They must also become aware of the alien pressure that is affecting their character, which is driven by the same anxiety, stress, and fears that keep the majority of people subordinate to the capitalist system. They must struggle for the transformation of their own alienated character. **Those who claim to be revolutionaries and socialists can make a difference only if they transform their own alienated, capitalistic personalities.** This is the only way that they can achieve the emotional wellbeing and clarity that will permit them to be free from manipulation and demagoguery. Absent such a transformation, a person remains unbalanced, unfocused and eclectic, like the great majority of leftists. The eclectic, alienated socialist cannot use the dialectic in a consistent way; each individual's ability to use the dialectic correlates directly with his or her ability to transcend the alienating features of capitalism that affect every revolutionary fighter.

Without first making the effort to change, no one can withstand the constant pressure and manipulation aimed at us by the ruling class. A revolutionary, even one with a strong backbone, also needs the perceptiveness of a balanced, healthy person who can transcend the emotional mess that makes us incapable of withstanding the pressure of capitalism that constantly surrounds us. Empathy, for example, is a quality that promotes dialogue, instead of the sterile debate that is so common in the left.⁴⁷ But most of us are too self-centered, competitive, and insecure to develop our capacity for empathy to its full potential. The ability to let go of our own ego's centrality is a character trait only available to people who struggle to transcend their own alienation and its effect on their psyche. Transcending the crippling limitations inflicted on us by capitalism is essential in order to attain the true independence that enables us to think objectively. This kind of transcendence is necessary for us to muster and master both emotional strength and objective perceptiveness. Without these qualities, we cannot muster the intellectual clarity, and openness to dialogue within the movement, that are critical if we wish to unite the growing number of people who are dissatisfied with the capitalist system.

Of course, we need more than dialogue to develop a united revolutionary strategy. We also need a clear revolutionary program and method, which can develop only through struggles with reformism and centrism. Thus, conflicts within the anti-capitalist movement are inevitable. But they must be balanced by an increase in our level of dialogue with those who can transcend alienation and become open to working out differences. The transcendence of alienation can only move people to the left, and thus is essential for a united revolutionary movement.

Developing the self-awareness necessary to transcend one's own alienation requires the willingness to take the time and accept the *risk* involved in even taking the baby steps in the right direction. I say "baby

steps” because I am acutely aware of how difficult it is to struggle against outside pressure, particularly when this involves changing our own alienated, enfeebled character. But history will not leave us alone about the need to accomplish this task.

There are many reasons for the failure of the anti-capitalist left, to date, to achieve fundamental social change. One cannot ignore the classic reasons that Marxist thinkers have outlined, such as the betrayals of the leadership. But those are outside the scope of this article. My point here is that one of the principal reasons for this failure is that the embryo of a community of liberated humans—that is, humans who can learn how to use their *uncrippled* potential—cannot remain an abstract possibility while waiting the establishment of a humanistic socialist society. This embryo must evolve *within the present society* to the point that it is strong enough to play an important role in providing a revolutionary alternative to capitalism.

I am also well aware that people who will form such an embryo will not simply fall from the sky. Rather, they will evolve, **because the social conditions require their evolution**. History will have to promote a different kind of revolutionary cadre: people who are willing to fight capitalism to the end, with the uncompromising spirit of Lenin, *while at the same time also being capable of transcending their own alienation*. This is the kind of human being that humanity now needs for its survival.

We hope that the increasingly catastrophic effects of climate change will provide both the social conditions and the non-alienated human material for a revolutionary change, but this will be possible only during the very early stages of climate change. That means *now*. As soon as thirty years from now, it may already be too late for such human beings to emerge in time to make a significant difference in the severity of climate change. If climate change and the crisis of decaying capitalism do generate the conditions necessary for a worldwide revolution, we need to be ready for it with many strong Marxist cadres who have already transcended alienation at least to some degree.

Climate Change and the Future of Human Society

Climate change is a topic that should be considered critical by all those who call themselves Marxists. None of the classic Marxists, such as Marx, Engels, Lenin, and Trotsky, could have foreseen climate change. For them, the project of socialism was always premised on the existence of objective factors that climate change makes obsolete. The most important factor was that capitalism was supposed to develop the productive forces to the point that would enable a the creation of a planned economy and socialism, which in turn would further develop the productive forces to the point that all humans on our planet would have their basic needs met. The advanced, collectively planned global economy was envisioned as allowing humans to do less work and have more leisure time for creative activity, so they could develop their humanity in a truly positive direction, unfettered by the many levels of oppression under capitalism—physical (from work, for example); political; emotional; social (racism, for example), and cultural—all of which cripple our human potential.

Climate change will almost certainly make this vision of socialist liberation impossible to achieve. A dramatic change in climate, as we have seen earlier, will destroy the productive forces, or at least set them back to a stone age level. Thus, climate change could destroy all of what have hitherto been considered the objective preconditions for establishing socialism.

We are already seeing examples, at a very early stage, of the kind of devastation that climate change can inflict. In addition to the damage done in the Philippines by the record-breaking recent typhoon, the abysmal situations in Syria, Somalia, and other countries in the Middle East and Africa are also a result of climate change, operating in a more subtle form. To give just one example, the civil war in Syria actually started because of climate change. Due to a severe drought, unprecedented in modern history, thousands if not millions were going hungry. Neither Assad’s dictatorship nor its allies in the rest of the capitalist world could handle the consequences of the drought. Then, when the Syrian masses rose up to protest, there was no revolutionary leadership that could lead them in a fight to overthrow capitalism. As a result,

the situation escalated into civil war, and thence into barbarism. Over 100,000 are dead, and over half of the population is displaced, either within Syria or abroad. The level of hunger and starvation in Syria today is worse than it was at the beginning of the civil war. The capitalist state has collapsed, and the country is divided into mini-states, many controlled by Islamists who are dragging the areas they have “liberated” from Assad back into the Dark Ages, to be ruled by Sharia law. Other parts of Syria are controlled by warlords and gangsters, of whom the most famous is Assad himself. Well-meaning youth, leftists, and liberals are trying to salvage what they can in these areas. But they are faced with overwhelming obstacles: a collapsed state, a chaotic society, and the failure or unavailability of the productive forces. The best they can do amid these conditions of barbarism is to obtain some medical supplies and food, so as to ease the suffering and hunger of the people to a small degree.

The lessons of the situation in Syria—which is only one example (Somalia is another)—are of great significance. We see in these examples the collapse of the capitalist state, its division into mini-states, and other developments that turn the historical clock backward, replacing capitalism with the barbarism of the feudal system and the Dark Ages. In the absence of a revolutionary alternative, the collapse of the capitalist system brings out backward and sometimes reactionary consciousness, as the desperate masses revert to the religious and sectarian consciousness instilled in them by reactionary demagogues who replace the “normal” capitalist politicians.

People in the imperialist countries tend to think that a situation like that in Syria cannot occur in the imperialist centers, with their advanced level of productive forces. But climate change can change this in few years. California, which has a similar Mediterranean climate to that of Syria, is now suffering from a severe drought. If it continues for few more years, it could be as bad as the drought in Syria that caused mass hunger. Half of California is a desert that depends on the snowpack from the Sierra Mountains for its water supply. With no snow in the mountains, there will not be enough water. Moreover, population growth skyrocketed in the years leading up to the current severe drought. If the drought continues unabated, the state will have the “choice” of halting the irrigation that makes possible most of the food production in Central Valley, which feeds a large swath of the US population, or else forcing the migration of millions to the north, with unthinkable consequences. If California continues to experience year after year of record-breaking low rain and snow levels, this could happen not in 20 or 30 years, but in three or four!

Worse yet, California is not unique in its vulnerability. The same scenario could occur in most of the western US. In addition, many countries with weak economies, imperialist and non-imperialist alike, are also experiencing the dramatic effects of climate change. The Mediterranean part of Europe (Greece, Italy, and Spain, as well as Spain’s Atlantic neighbor, Portugal) are at the same level of risk as California. Take Spain, for example. Parts of Spain are drying up fast. Some farmers in Southern Spain have been forced to abandon their farms for lack of water, and people’s personal wells are dry, making survival difficult in some areas. Spain is also, unquestionably, getting a lot hotter: “Spain experienced warm temperatures during October [2013], with an average monthly temperature of 17.5°C[,] or 2.1°C above the 1971–2000 average. This resulted in the sixth warmest October since national records began in 1961.”⁴⁸ This is above the 2 C limit that conservative scientists tell us we must stay within in order to avert a tipping point that will cause the meltdown of civilization. And, according to the conservative IPCC: “The southern Iberian Peninsula could be one of the regions most affected by increase in year-to-year variability in summer climates and thus a higher incidence of **heat waves and droughts**. Mediterranean droughts would start earlier in the year and last longer.”⁴⁹

Of course, climate change is not all about droughts. It is about both droughts *and* floods, and how they complement each other in their devastating effects. News about recent effects of climate change in Spain illustrates this:

“The devastation left behind by the floods [in September 2012] caused thousands of euros of damage which could take years to recover from. But far from being an isolated incident, the

floods—the worst in Andalucia for a decade—are just the latest example of extreme weather events to affect Spain. Barely a month before the rain, Malaga suffered what officials described as ‘the worst fires in living memory’. But while this was found to have been caused by a bonfire, many others across Andalucia were due to the weather, with a total of over 12,000 hectares destroyed by fire in Andalucia this summer, an area over six times bigger than in 2011.”⁵⁰

Drought and floods are also taking place in Africa. But in Africa, people are not just displaced and hungry, but literally starving to death because of this. As the delegates gathered in Poland in November 2013 for another meaningless conference on climate change that will accomplish nothing, *the New York Times* reported that:

“Arable land [in Kenya] is disappearing and diseases like malaria are appearing in highland areas where they had never been seen before. ... As the hundreds of diplomats and advocates assembled for talks..., Justus Lavi was waiting for rain in Kenya. The wheat, beans and potatoes he planted on his farm in Makueni County sprouted, but the rainy season brought only two days of showers, threatening to ruin his yield. In northern Somalia, Nimcaan Farah Abdi’s 10 acres of corn, tomatoes and other vegetables were ruined as violent storms swept the Horn of Africa. A typhoon last weekend in nearby Puntland killed more than 100 people, a disaster overshadowed by the far more destructive one in the Philippines. ‘My farm has been washed away,’ Mr. Abdi said. It was the second year in a row of unusually heavy storms to have destroyed his livelihood, leaving him uncertain about how he will provide for his six children.”⁵¹

The speed at which climate change is causing devastation in Africa and other poor semi-colonies is beyond alarming. The devastating typhoon that killed thousands in the Philippines, and displaced 4 million people is an example of this. The working class and the poor in the Philippines will probably never be able to recover fully from the devastation caused by Typhoon Haiyan. What will stop civil wars, triggered by climate change as occurred in Syria, from spreading throughout Africa in the coming decade or two? What will stop the collapse of “civilization” in these areas? The only positive answer is the socialist revolution. But it is not likely to come soon enough.

This is the fallout *just from the bare beginning* of climate change. Yet there are no signs that world capitalism is going to take serious measures to stop it, or at least reduce its intensity. Another major problem is that there are no revolutionary parties that tell the truth and are capable of leading the masses to power. Even under the best circumstances, it takes decades to build a revolutionary party of this kind. Thus, unless a miracle happens, world capitalism will not be overthrown in the next 15 to 25 years. Meanwhile, during these critical years, while we *may* still have one last chance to blunt the worst impacts of climate change if we take immediate action, capitalism will instead continue to *aggravate* climate change by releasing massive amounts of CO₂ and other greenhouse gases into the atmosphere.

As climate change intensifies, situations like those in Syria and Somalia will expand into the rest of the world. Severe droughts will become more widespread, and the glaciers that currently provide billions of people with water for irrigation and consumption will shrink and then disappear. As a result, water and food will become scarce; billions of people will go hungry, and many will starve to death. The opposite of droughts, floods, will only aggravate the situation. As the oceans rise, the major coastal cities that lie at the heart of civilization will be in big trouble. And this does not even take into account the effects of the acidification of the oceans and the release of massive quantities of toxic, explosive methane. As capitalist civilization starts to collapse, more and more states will become failed states like Syria and Somalia. Wars over water and food will become the norm. The danger of nuclear war will become acute, as the ability of the imperialist powers to restrain the use of nuclear weapons will likely vanish when the world descends into chaos.

We should expect massive uprisings throughout the world when the effects of climate change first become unmistakably catastrophic, about 15 to 40 years from now. **This will present massive challenges, even if revolutions to overthrow capitalism on the global scale succeed.** What kind of

workers' states can we expect under the conditions of severe scarcity brought about by climate change? The good news is that socialism does not promote the excessive, terrible waste that is inevitable under capitalism. Capitalism rapes the planet, consuming huge quantities of natural resources in order to produce things that humans *do not need*. Because of the greed for profit of the ruling class, capitalism ignores the genuine needs of those who do not have money, while using enormous amounts of energy and raw material to create unnecessary products and to instill an artificial need for them in people who have money to spare. Trillions of idle dollars are used in ads, for example, to induce in people a craving to buy billions of items that they do not need, but that are used to lull their terrible feelings of emptiness and boredom.

Nonetheless, to build a healthy socialist society, we still need to start with the advanced productive forces of capitalism. Unless the productive forces are at a highly developed level, it is impossible to create a decent standard of living for billions of people. Thus, it is a total paradox to build socialism under conditions of serious scarcity. Under conditions of scarcity, the dictatorship of the proletariat (the stage before socialism, in which it is necessary to keep an armed state to combat counterrevolutions) will not be able to provide sufficient food, water, and other necessities for the masses. This paradox will only become increasingly acute over time. Between 15 and 40 years from now, when the socialist revolution is more likely to be a concrete possibility, the effects of climate change will still be at an early stage. After that, it will only get worse for many years to come. What could start as relatively "mild" disruption due to climate change could easily be transformed into catastrophic conditions *even after the working class takes power*, because the processes that create and aggravate climate change cannot be brought to an immediate halt. If that occurs, it will likely be impossible to go from the dictatorship of the proletariat to a classless society: socialism.

For a long time, revolutionary socialists have assumed that the proletariat is the only revolutionary class capable of overthrowing capitalism. The classic Marxist reasoning is that the proletariat's social concentration in large workplaces and cities gives it the ability to organize effectively on a massive scale, enabling it to disrupt the process of production, escalate to political general strikes, and ultimately take state power. Marxists' reliance on the revolutionary capability of the proletariat stems from the objective role of the proletariat in the productive forces. Thus, it is the social weight of proletariat in the productive forces that make it a social class capable of overthrowing capitalism.

Yet all this has already begun to change, even before climate change has really hit hard. Because of the significant weakening of the unions and the introduction of new technologies, the capitalists have already been able to break up large factories and move them all over the world. In addition, the defeats of the working class are already allowing the capitalists to give workers new titles such as "independent contractors," and to force them to work in isolation from other workers and accept a meager salary with no benefits. The prevalence of temporary workers is an even better example of the means by which the bourgeoisie is avoiding the concentration of the working class into one workplace and one company on a regular basis, and thus weakening the ability of the working class to fight. The temporary worker rarely has a union, and must change work locations constantly. This makes it increasingly difficult to build the worker solidarity necessary to conduct effective strikes that shut down production. In short, the capitalists have already succeeded to a large extent in breaking up concentration of the proletariat in large factories, large workplaces, and cities. The downfall of the economy and the working class in Detroit, due to the closure of the large auto factories and the evisceration of the UAW, is a good example.

The decentralization of the productive forces has already greatly undermined the social weight of the traditional industrial proletariat. On top of this, when climate change starts to hit really hard, some regions and sectors of the productive forces will collapse altogether. The greater the effect of climate change, the less the proletariat will be able to organize around the productive forces. But this type of organization is what gives the working class its social weight, and its revolutionary ability to stop the productive forces from functioning and take control of them in its own revolutionary name. In other words, the objective factors that make the working class a revolutionary class will be dramatically weakened under conditions

of mass starvation, diseases, wars over water, and all the other effects of climate change, which collectively will bring about the collapse of the capitalist state and the productive forces. The well-developed productive forces that are the precondition for socialism, as it has traditionally been envisioned, will be gone. When the majority of people do not even have enough food and water to survive, it will become impossible to maintain an advanced industrial economy. That means that the ability of classic Marxism to explain the world will clearly be obsolete, as climate changes forces the social order of class society to take giant steps backward toward barbarism.

It is still possible that massive worldwide uprisings **during the first decisive stages** of climate change will result in the overthrow of capitalism and the creation of workers' states under the dictatorship of the proletariat (a necessary stage, if only to make it possible to stamp out the inevitable attempts at counterrevolution). But even if the dictatorship of the proletariat enjoys massive support, serious attempts at counterrevolution will continue for a long time, because climate change will make life extremely difficult for everybody, tempting many people to fall prey to counterrevolutionary demagoguery and recruitment. It is impossible to predict how long a "healthy" dictatorship of the proletariat could last under extreme conditions of scarcity. It is unlikely, however, that it would last for a very long time unless the extreme scarcity is alleviated. Stalinism is still a fresh reminder of what can emerge after a socialist revolution if conditions are unfavorable.

Moreover, even the most successful revolutions cannot change the power of Nature. The ability of the human race to proceed to socialism will remain at the mercy of natural forces. The scientific understanding of climate change does not give us a lot of hope for socialism in the 21st century, or even the 22nd. It is unknown to what extent climate change will decimate the human population. Yet even relatively moderate climate change is likely to kill millions and more likely billions of people. So even if mass uprisings 15 to 40 years from now bring about an international planned economy under the dictatorship of the proletariat, such a regime is not likely to survive unless part of its planning consists of reducing the global population through measures such as allowing couples to have only one child. This is harsh, but the alternative would be to subject an even larger number of people to death from starvation, thirst, disease, and other climate-change-fueled causes. Whatever happens, you will not find the resulting societal problems predicted, much less resolved, by reading Marx or any other great socialist. The only thing we can predict for sure is that the human race will be in a very difficult situation.

The reformist and centrist left do not want to hear this or think about it. They would rather stick to their brittle understanding of traditional Marxism—an understanding devoid of dialectical insight—even though it does not provide any tools for understanding the devastating effects of climate change. The ability of the left to understand and respond to the issues posed by climate change does not go much further than that of the average, backward person. For now, most of the left, together with the rest of the alienated human race, would rather just ignore climate change. As I wrote earlier, people with the typical alienated, backward consciousness will not be persuaded to care about climate change until it hits them hard. But by that time, it will be too late.

No one knows for sure how dramatic the effects of climate change will be. But more and more honest scientists are looking ahead with dismay. Take for example, leading climate scientists like Kevin Anderson and Alice Bows. In the influential scientific journal *Nature Climate Change*, they excoriated their fellow scientists for giving in to the pressure of capitalist politicians by trying to soften the effects of climate change.

“[I]n developing emission scenarios scientists repeatedly and severely underplay the implications of their analyses. When it comes to avoiding a 2°C rise, ‘impossible’ is translated into ‘difficult but doable’, whereas ‘urgent and radical’ emerge as ‘challenging’—all to appease the god of economics (or, more precisely, finance). For example, to avoid exceeding the maximum rate of emission reduction dictated by economists, ‘impossibly’ early peaks in emissions are assumed, together with naive notions about ‘big’ engineering and the deployment rates of low-carbon

infrastructure. More disturbingly, as emissions budgets dwindle, so geoengineering is increasingly proposed to ensure that the diktat of economists remains unquestioned.”⁵²

This kind of criticism is certainly a positive step, especially if honest scientists like Anderson and Bows can persuade their colleagues to join them in playing an important role against the capitalists’ attempts to minimize the important of climate change.

Even if the imminent climate change (combined with the rest of the environmental savagery inflicted by capitalism) proves to be only moderate by geological and historical standards, it will still have a massive effect on civilization. Most scientists agree that the combination of climate change and other types of environmental destruction is *already causing* the sixth mass extinction in our planet’s history.⁵³ It is impossible to predict how complete the mass extinction will be, after the dust from climate change has settled. It depends in part on the severity of the coming climate change, but even if it turns out to be unexpectedly moderate, its effects will still last for hundreds—more likely thousands—of years. If we miss the chance for revolution during the beginning stage (say 15 to 40 years from now), it will be more difficult for a progressive socialist revolution to occur later, because the entire human race will be falling apart as civilization collapses.

Climate Change and Evolution

We know that major changes in Earth’s climate can trigger a leap in evolution. Indeed, severe climate change has played a leading role at several key points in the path to the current evolutionary state of our planet.⁵⁴ A number of times during the Earth’s geological history, planetary catastrophes caused by climate change and other natural causes brought about evolutionary leaps in the development of life. For example, many scientists think that the creation of the moon initially resulted in the most climatically chaotic period in the history of the planet. But later, it was the effect of the moon’s gravity that created the oceanic tides, causing the erosion and dissolution into the ocean of the elements needed to kick off the development of the first single-celled organisms. Similarly, the big freeze that caused the entire planet to be covered with ice almost a billion years ago was succeeded by a climatic warming that allowed the development of multi-celled organisms. The massive extinction of 95% of all life on the planet 250 million years ago, which was caused by climate change and global warming, ultimately allowed the development of more complex and diverse life forms, including the first mammals. And finally, the catastrophe that killed all the dinosaurs 55 million years ago, which included massive climate change, brought about the domination of mammals over life on land; thus, ultimately, it was this catastrophe that made possible the emergence of humans.

All this raises a puzzling question. Is climate change necessary for the evolution of humans from their current, still primitive state, in which further development is severely restricted by class society, into egalitarian humans capable of realizing their full potential? We know that climate change is responsible for key economic and social leaps by the human race. For example, civilization and class society would not have started in the Middle East 9,000-10,000 years ago in the absence of the severe droughts that took place after the Little Ice Age.⁵⁵

The puzzle intensifies when we take into account the effect of alienation. As we saw earlier, alienation provides us with a fundamental explanation of why capitalism is able to prevail. It complements the standard Marxist explanation, which boils down to the betrayal of the leadership of the working class, which stymies the socialist revolution. However, the betrayal of the leadership cannot be fully comprehended without putting it in the context of alienation.⁵⁶

Recent studies⁵⁷ reveal that the human brain is wired in a way that makes it very difficult for a person to move away from subjectivism. The brain is wired in a way that makes a person defenseless against the manipulation and demagoguery that are so common in capitalism, as well as against brainwashing by the mass media and similar influences. Advertising and marketing executives, for example, use psychological research to find ways to exploit this weakness in a very sophisticated fashion, often beneath the threshold

of our conscious awareness. Thus, it is very difficult for a person to experience and think beyond the conformity of capitalistic social relations.

This difficulty is partially explained by the fact that the frontal cortex in our brain is essentially a shell surrounding the more animalistic parts of the brain, which are constantly manipulating the frontal cortex to rationalize the emotional chaos of the limbic system and the amygdala. The latest neurological research shows that the frontal cortex, the “thinking” part of the brain, has only limited independence. Rather, it is subordinate to the more “primitive” limbic system, which includes the amygdala. Under the pressures of capitalism, the limbic system makes us chronically depressed and nervous. Thus, the very structure of our brains contributes to our behaving like herd animals. This arrangement of the brain makes objective thinking very difficult. One may argue that it is because of its structure that our brain is so receptive to the alienating, manipulative pressure and ideas of the ruling class, even though they are harmful for most people.

The clever reader may ask: If the brain’s structure makes us so irrational and incapable of withstanding the manipulations of the system and its agents, isn’t the project of socialism hopeless? The answer is not straightforward. There are three fundamental reasons for the survival of capitalism: 1. The resistance of the capitalist ruling class to fundamental change. This is fixed. It cannot change without overthrowing the ruling class. 2. The betrayal of the working class by reformist and centrist leaderships, that is, by leaders that *claim* to want social change. This can be changed if the (mis)leaders are exposed, and replaced by a genuinely revolutionary Marxist leadership. 3. The alienation of the masses (as well as their false leaders). This last factor is where the structure of the brain must be taken into account, because it makes the transcendence of alienation very difficult.

Yet there *is* a way to overcome the limitations on our objectivity that arise from our brain structure. If a revolutionary movement and party were to take on, seriously and scientifically, the project of overcoming alienation within the revolutionary movement, this would contribute significantly to the development of a new, more emotionally and socially aware, humanistic human being, capable of mastering objectivity and dialectics. As I have illustrated in this article, the development of cadre with these characteristics is critical for the building of a revolutionary party with a strong revolutionary periphery. Armed with these capabilities, which have never yet been developed, such a party would be better able to expose the reformist and centrist misleaders, and to position itself as an alternative to replace them. Led by such a party, the working class would be better situated to fight to overthrow that unchangeable factor, the ruling class, that cannot be reformed.

Obviously, even under a capitalist system that bolsters the domination of the irrational parts of the brain, **some people can become fully human, and achieve the ability to express their potential, including the ability to be empathetic and objective.** Thus, we do not need to change the structure of the brain for this. Rather, what we need to change is the system that reinforces the more primitive parts of our brain.

For millennia, humans managed quite well with the brain that they had, even though it was dominated by the same irrational limbic system that dominates our brain these days. The “secret” of the hunter-gatherers’ success was that they lived in a collective society in which their brain was balanced. As we saw earlier, in those societies, the brain is not dominated by negative emotions orchestrated by the amygdala, which “thinks” that there is always a lion ready to grab the person. Positive emotions such as caring, compassion, and empathy were combined with collective joy. The people in a hunter-gatherer group were intimately connected to each other, and the amygdala and its associated neurons came into play only when real lions and other dangers were lurking, or when the group went hungry. This is exemplified by the social life of modern hunter-gatherers, such as the Bush People in Africa, and the indigenous groups in the Amazon that have not had significant contact with outside influences.

The “irrationality” of the brain became a dominant factor with the advent of class societies. In capitalist society, the dominance of the amygdala and its “negative” emotions has escalated to a

monstrous sickness. This is so, because the individual is so isolated, alienated, and disconnected from any genuine, healthy collective group dynamic. Indeed, it is because the balance in our brains has become so severely disrupted that the alienated person remains indifferent to the fact that the survival of humanity is at stake. This disruption is exacerbated when the class struggle is very low, as it is today. The workers' only chance for positive interactions with their fellow workers was through the kind of collective solidarity that has now disappeared to a large degree. As time progresses, there is less and less collective memory of the kind of robust class struggle solidarity that lasts for life and is transmitted from one generation to the next.

Under capitalism, there are few people who can maintain a balanced brain in which negative emotions and experiences are balanced with positive emotions. To begin with, the alienated person has difficulties in experiencing solidarity and support within a collective group. As a result, the great majority fail to develop their full humanity under capitalism. It is important to note here, that the terrible class oppression and exploitation inflicted by the system are by themselves huge obstacles to humanistic development. **But history also clearly shows that a certain degree of humanistic development, in which alienation is transcended, is necessary for the overthrow of capitalism.** Moreover, such transcendence cannot take place spontaneously, without the intervention of a revolutionary party that knows what it is doing and what is needed for victory.

As the Arab Spring and the civil war in Syria have recently demonstrated, climate change does not cause the **spontaneous** overthrow of capitalism. Greater shocks resulting from climate change, together with a perceptive leadership equipped with a revolutionary program that can cut through the alienated relations within the mass movement, may be critical for success.

The question remains: will climate change create such dramatic shocks that it forces the human race to build a collective socialist social order, or will humans be crushed under the pressure and perish? It is impossible to know the definitive answer to this question. We know that climate change has been involved in previous major evolutionary leaps in human society, such as the evolution from hunter-gatherers to "civilization" based on agriculture and class differentiation. Since the development of agriculture, human society has evolved from ancient class society, to feudal class society, to capitalist class society. But all class societies have remained, relatively speaking, primitive human societies. (By primitive, I do not mean in terms of the technology and science that are used to develop the productive forces. I refer to the backwardness of our social and cultural development, which lags far behind that of our science and technology.)

Thus, on the grand evolutionary scale, the transition from one kind of primitive class society to another have been "minor" evolutionary steps, which did not require the intervention of nature. However, the evolution from our current class society (and with all due respect, capitalism in some ways is even more primitive than previous class societies) to a classless egalitarian society—one without alienation, and with a culture in which humans can use their full potential—would be a huge step for humanity, much bigger than the steps from one class society to another, "higher" class society. It is **at least** as big a step as the evolution of hunter-gatherers into farmers, with accompanying development into the "civilized" world of a class society with kings, priests, armies and so on—a step that probably would not have occurred in the absence of pressure from climate change. Taking into account the fact that the human brain is still struggling to accommodate itself to our current (primitive) class societies, one may validly argue that we need an even greater degree of pressure of nature, in the form of even more drastic climate change, to make the huge leap from class society to a collective egalitarian classless society.

Humans came from nature, and despite all the attempts, they cannot fully break from nature. They can only alienate themselves from nature, as the "leaders" (the capitalists, their politicians, and their state) do when they attempt to destroy nature and replace it with artificial greed based on the destruction of natural resources, and artificial consumerism based on the rape of nature for profit. But nature always has the last word. Now it is turning the tables on the humans, using its own destructive forces against our species. The

general laws of evolution give us a good understanding of what will happen to the human race if it fails to adapt to the coming changes. Only time will tell if nature will cause our extinction, or will instead only force us to make the big necessary transformation from a primitive destructive class society into an evolved egalitarian society based on love and respect for nature and its living creatures, including our own.

Thus, getting rid of capitalism is not a moral question; it is about the evolution and survival of the human race. To reiterate: **It is an evolutionary necessary for the human race to get rid of capitalism and establish a more advanced collective egalitarian society.** If we do not succeed in overthrowing capitalism, the human race is likely to become extinct. In this sense, the human race is not different than any other animal: failure to adapt to the changing conditions of nature will doom us to extinction.

In this sense, the laws of social evolution parallel those of biological evolution. Biological evolution through natural selection is an established model of how nature works. For example, when the flowers in a particular ecosystem change in shape to become longer and narrower, it becomes harder for hummingbirds to reach the nectar. In order to survive, the hummingbirds in that ecosystem must develop a longer and perhaps curvier beak. The way the evolutionary process makes that development occur is that the hummingbirds with longer beaks survive better, and produce more offspring, than the ones with shorter beaks. Over time, the entire local population consists of longer-beaked hummingbirds. This is not a matter of choice; the hummingbirds must develop longer beaks, or they will become extinct.

The human race is facing a similar dilemma. It has to get rid of class societies (and capitalism in particular), or become extinct. Because of the complexity of human society, and the role of conscious choice in human evolution, we cannot make a mechanical comparison between social evolution and biological evolution. But in an analogous way, the normal “flukes” that drive the evolutionary process will have to happen with human society. By the normal evolutionary flukes, I mean the routine genetic “accidents” that result in physical variations within a species, some of which make individuals better suited to adapt to a changing environment. Of course, unlike hummingbirds in their biological evolution, humans in their social evolution will not be developing better physical features, but better social features and a different consciousness. They will grasp the need to devote their lives to overthrowing capitalism, fighting for a collective socialist society, transcending alienation, and mastering the dialectic thinking that reflects how matter works both in the natural physical world and in the human social world. Humans who can develop in this way will provide the human “seeds”—the leadership in the class struggle to overthrow capitalism—for starting a new collective human society. The development of this kind of human being is simply necessary for the human race to survive, and not become extinct.

It may seem ridiculous to compare such a complex process as the evolution of a collective, non-alienated human society to the evolution of a bird with a longer beak. We are discussing the development of a new social consciousness, not new physical features. In essence though, only the emergence of such human material can make a difference to the prospects for human survival. In this sense, it is the same as the evolutionary need that created the hummingbirds with a longer beak, which made the critical difference in the hummingbirds’ survival. Fortunately, the time necessary for the development of such humans is probably much shorter than the time it took hummingbirds to evolve longer beaks.

It is not possible to predict with any accuracy the prospects for survival of human race if capitalism is not overthrown within the next 30-50 years. In fact, the way things stand today, we cannot be sure the human race will survive even if capitalism *is* overthrown within the next 50 years. As we saw earlier, the data about climate change is so grim that it may be too late to prevent the catastrophic destruction of life on this planet even if the human race takes drastic steps. And if the positive feedback loops spin totally out of control, it may take millions of years for the planet to recover from the catastrophic consequences.

On the other hand, the human population is about seven billion people—enough so that even severe climate change *probably* will not kill all of us. (But don’t count on it! A temperature rise in the magnitude of 10C to 20C would wipe out all or nearly all life on the planet, including us.) Thus, even if we do not

succeed in overturning capitalism before the collapse of civilization, it is possible a small population of humans will survive. If so, they will probably realize that they can only restore the human race and its place in the planet through the establishment of a radically different, collective society. We don't know if they will retain enough technology to build a green-friendly advanced society, or whether they will have to start over from the Stone Age and recapitulate from scratch the development of the productive forces and the stages of class society—a depressing prospect.

The geological history of the planet shows that life eventually recovers from even the worst catastrophes, and the evolution of life bounces back. Indeed, such catastrophes may bring about an evolutionary leap to more complex life forms. But that does not mean that humans will be around to witness it! At this point it is up to nature whether humans will be among the survivors of the coming climate change and the sixth massive extinction of life on this planet. The only way to increase our chances is to overthrow capitalism as soon as possible. That means yesterday!

Conclusion

The need for a revolutionary leadership is more urgent than ever. Building such a leadership is our only hope for survival. But what most Marxists have not yet understood is that this leadership not only must understand economics and politics, but also must have an acute understanding of how alienation has kept the human race, **including most socialists**, subordinate to capitalist manipulation. The restoration of dialectic thinking is critical. Without it we will only descend into deeper and more hopeless stupidity.

Saying that we must restore dialectic thinking does not, however, imply that we can fight alienation with abstract dialectics. In order for us to escape the chains of alienation with which capitalism has bound us, **all human interaction within the revolutionary movement will have to change**. This will be possible only if revolutionaries successfully struggle to transcend the capitalistic personality that makes them emotionally crippled and steepens them in petty bourgeois values. Only by transcending the capitalistic values inside us can we gain the ability to use the dialectic properly, that is, to see reality as it is. Evolution, the crisis of capitalism, and the chronic crisis of leadership in the workers' movement have taught us that **only humans with the capacity to transcend alienation can lead the working class to power**, and thereby maximize the chances that humanity can survive climate change and evolve into a collective society with a positive relationship with nature.

As long as alienation continues, however, there is no chance that we can stop the coming catastrophe. This is why the struggle against alienation is so critical for a revolutionary organization. A different human being will at least have to **start** emerging if we are to have any chance to stop the destruction of the planet. In addition, every revolutionary organization must place the struggle against climate change, including all the environmental destruction that is escalating the process, as the **highest priority in its program** and its daily practice.

If the human race survives the next few decades, there is no doubt that at some point there will be a mass international revolt against climate change and capitalism. One can keep ignoring climate change as long as it does not affect one personally. But when your children are going hungry and thirsty, the effects of climate change become impossible to ignore. Thus, it is clear that every organization that considers itself revolutionary should immediately initiate a massive campaign about the need to overthrow capitalism as our only chance to avert the extinction of the human race, and combine it with daily interventions against the effects of ongoing environmental destruction. Any organization that fails to do so does not deserve the title “revolutionary.” Any revolutionary party and revolutionary international worthy of the name must also develop and implement a set of transitional demands with which to concretely intervene in the struggle against climate change. This is the only way we have any hope of ameliorating the meltdown that will inevitably arrive.

¹ http://www.nytimes.com/2013/02/23/us/drone-pilots-found-to-get-stress-disorders-much-as-those-in-combat-do.html?_r=0

² From Karl Marx, *Economic and Philosophical Manuscripts*, quoted in *Marx's Concept of Man* by Erich Fromm, pages 141-142, emphasis Fromm's. The work from which this quotation is taken is available online in a different translation at <http://www.marxists.org/archive/marx/works/1844/epm/3rd.htm>.

³ For a fuller discussion of the market personality, see http://www.humanistsforrevolutionarysocialism.org/Book_Chapters/Chapter%208/Chapter_8.html)

⁴ Eric Fromm, *The Sane Society*, page 181.

⁵ For more on the subject of the need to relate to a group, see http://www.humanistsforrevolutionarysocialism.org/Book_Chapters/Chapter%2014/Chapter_14.html and http://www.humanistsforrevolutionarysocialism.org/Book_Chapters/Chapter%2015/Chapter_15.html)

⁶ Eric Fromm, *To Have or to Be*, pages 92, 93.

⁷ For example, see <http://www.sfgate.com/default/article/Workplace-bullying-more-common-than-most-think-4958484.php>)

⁸ Leon Trotsky, *My Life*, pages 503-504, as quoted in

http://www.humanistsforrevolutionarysocialism.org/Book_Chapters/Chapter%2012/Chapter_12.html, at page 5.

⁹ Leon Trotsky, *My Life*, pages 503-504

¹⁰ Leon Trotsky, *History of the Russian Revolution*, page 285

¹¹ A video of the forum (which, curiously, omits the comments from the floor and the speakers' responses) is available at <http://www.youtube.com/watch?v=8c-XIyXwVNC&list=UUMIgEJUyBXsO4ckVj3dYasw>.

¹² "Left Opportunism and Syria," forthcoming in *International Trotskyist*, Winter-Spring 2014, and available on our Facebook page at <https://www.facebook.com/notes/humanists-for-revolutionary-socialism/left-opportunism-and-syria/10151677306707283>

¹³ <http://guymcpherson.com/2013/01/climate-change-summary-and-update/>

¹⁴ <http://guymcpherson.com/2013/01/climate-change-summary-and-update/>

(Links in original: "scientists agree": <http://climatechangepsychology.blogspot.com/2012/12/david-spratt-scientists-call-for-war-on.html> ; "concludes that": <http://www.reuters.com/article/2012/12/18/energy-coal-idUSL5E8NI4G620121218>)

¹⁵ <http://guymcpherson.com/2013/01/climate-change-summary-and-update/>

¹⁶ <http://www.scientificamerican.com/article.cfm?id=phytoplankton-population>

¹⁷ See <http://www.who.edu/main/topic/ocean-acidification> and <http://www.ocean-acidification.net/FAQeco.html>.

¹⁸ <http://guymcpherson.com/2013/01/climate-change-summary-and-update/>

(Links in original: "unprecedented rate": <http://www.enn.com/climate/article/45006> ; "mass extinction": ftp://ftp.gfdl.noaa.gov/pub/mbw/Ocean_Acidification_Papers/Veron_2008.pdf; "atmospheric oxygen": <http://survivalacres.com/blog/oxygen-levels-are-dropping/>)

¹⁹ http://e360.yale.edu/feature/an_ominous_warning_on_the_effects_of_ocean_acidification/2241/

²⁰ http://www.nsf.gov/news/news_summ.jsp?cntn_id=116532

²¹ National Oceanic and Atmospheric Administration, 21 October 2010, as cited in <http://thebiggestlievertold.wordpress.com/?p=262&preview=true> (Link in original: "new climate pattern": <http://www.scientificamerican.com/article.cfm?id=the-arctic-shifts-to-new-pattern>)

²² <http://ngm.nationalgeographic.com/2012/12/methane/lavelle-text>

²³ <https://scripps.ucsd.edu/news/1779>

²⁴ <http://thebiggestlievertold.wordpress.com/?p=262&preview=true>

²⁵ <https://pangea.stanford.edu/research/Oceans/GES205/methaneGeology.pdf>

²⁶ <http://thebiggestlievertold.wordpress.com/?p=262&preview=true>

²⁷ <http://thebiggestlievertold.wordpress.com/?p=262&preview=true>

²⁸ See <http://monthlyreview.org/2010/09/01/our-last-chance-to-save-humanity> for a review of Hansen's book on climate change, *Storms of My Grandchildren*, published in 2009.

²⁹ The list was obtained from <http://collapseofindustrialcivilization.com/tag/arctic-amplification/>.

³⁰ http://www.nsf.gov/news/news_summ.jsp?cntn_id=116532

³¹ <http://www.sciencedaily.com/releases/2011/01/110127141659.htm>

³² <http://neven1.typepad.com/blog/2011/12/arctic-methane-russian-researchers-report.html?cid=6a0133f03a1e37970b0168e6798176970c>

³³ <http://www.livescience.com/22793-methane-antarctic-ice.html>

³⁴ http://www.nasa.gov/mission_pages/fires/main/world/20120828-russia.html

³⁵ <http://blogs.smithsonianmag.com/science/?p=12512>

³⁶ <http://mtkass.blogspot.com/2013/04/the-beaufort-gyre.html>; on the Beaufort Gyre generally, see <http://www.whoi.edu/page.do?pid=66296>.

³⁷ <http://phys.org/news/2013-02-sunlight-climate-warming-gas-arctic-permafrost.html>

³⁸ <http://www.nature.com/ngeo/journal/v6/n5/full/ngeo1797.html>

³⁹ http://www.sciencecodex.com/top_predators_also_have_sway_over_climate-107096

⁴⁰ See <http://www.scientificamerican.com/article.cfm?id=did-climate-change-cause-typhoon-haiyan> and <http://www.pri.org/stories/2013-11-25/more-analysis-storm-expert-says-maybe-climate-change-did-play-role-typhoon-haiyan>.

⁴¹ <http://www.sfgate.com/science/article/California-on-course-for-driest-year-on-record-4971192.php>

⁴² <http://www.sfgate.com/default/article/Population-growth-increases-climate-fear-4781833.php>

⁴³ <http://www.nationofchange.org/are-we-falling-climate-precipice-1387375963>

⁴⁴ http://www.tomdispatch.com/blog/175656/tomgram%3A_engelhardt,_climate_change_as_history's_deal-breaker/, reprinted by the Asia Times at <http://www.atimes.com/atimes/World/WOR-01-050313.html>

⁴⁵ http://www.tomdispatch.com/blog/175656/tomgram%3A_engelhardt,_climate_change_as_history's_deal-breaker/

⁴⁶ See “Michigan’s ‘Right to Work’ Law: A Historic Blow to the Labor Movement” in *International Trotskyist (New Series)*, Vol. 2, Issue 2 (Fall 2013), p. 22 (http://www.humanistsforrevolutionarysocialism.org/Publications/ITv2n2_web.pdf)

⁴⁷ For more on this subject, see the chapters of my unpublished book entitled “*On the Ability to Love*” (http://www.humanistsforrevolutionarysocialism.org/Book_Chapters/Chapter%2014/Chapter_14.html) and “*Objectivity as a Requirement For Love*” (http://www.humanistsforrevolutionarysocialism.org/Book_Chapters/Chapter%2015/Chapter_15.html).

⁴⁸ <http://www.ncdc.noaa.gov/sotc/global/2013/10>

⁴⁹ http://wwf.panda.org/about_our_earth/aboutcc/problems/rising_temperatures/hotspot_map/spain.cfm (bold in original)

⁵⁰ <http://www.theolivepress.es/spain-news/2012/11/03/on-the-frontline-in-climate-change-battle/>

⁵¹ <http://www.nytimes.com/2013/11/17/world/growing-clamor-about-inequities-of-climate-crisis.html>

⁵² As quoted by Naomi Klein in <http://www.newstatesman.com/2013/10/science-says-revolt>

⁵³ See, for example, the documentary film *Call of Life* (<http://www.calloflife.org/>).

⁵⁴ See documentary video series: http://docuwiki.net/index.php?title=Catastrophe:_Series_One#ed2k_Links.

⁵⁵ See my article “Why Climate Change Is Necessary for the Leap to Socialism” (http://www.humanistsforrevolutionarysocialism.org/Current_Articles/Climate+Evolution.htm).

⁵⁶ See the articles collected in the pamphlet entitled *Dialectics, Alienation & Revolution* (http://www.humanistsforrevolutionarysocialism.org/Publications/Dialectics_Pamphlet.pdf).

⁵⁷ See, for example, the material covered in the following courses published by the Teaching Company (<http://www.thegreatcourses.com/>): *Understanding the Brain* by Dr. Jeanette Norden; *Biology and Human Behavior and Stress and Your Body*, by Professor Robert Sapolsky; and *The Neuroscience of Everyday Life* by Professor Sam Wang.