On the Intrinsics of Individual Human Activity

Qudong Wang

We consider the activities of a matured individual human being. We adopt the opinion that the world is a collection of a variety of independent entities, in which and with which independent entities interact.

A matured individual humans being is one independent entity. His/Her activities have a physical component and a mental component. Correspondingly, it has a physical existence, which we will also refer as his/her body, and a mental existence, which we will also refer as his/her mind. Between the two, the physical existence is basic in the sense that a mental existence is always attached to a physical existence. There exist no mental activities without a physical host.

An individual interacts with the world through its physical existence. Mental activities are internal and they do not directly interact with the world. The mind receives feedbacks through the sensors attached to the body. The feedbacks presented to the mind are organized subjecting to the a priori framework of space, time and relationships. The mind works on and responds to the feedbacks, directing the physical activity of the individual.

1. Internal Intrinsics

Two embedded defaults of a human mind are (1) the individual animal instinct for its own physical and biological preservation, and (2) a mental function which we call as its intelligence. The actual mental activities can be divided into a part which we shall call as emotional and a part which we shall call as intellectual, in both of which the animal instinct and the intelligence play a part. The emotional part, consciously or unconsciously, are driven primarily by the animal instinct for individual physical and biological preservation. The intellectual part, organizing and working on the data constantly collected through the sensors of the body, relies primarily on the intelligence, a mental ability of abstraction, generalization, induction and deduction based on logic. The emotional part is more spontaneous, serving in occasions also as motivations and as a drive for human intellect. The emotional and the intellectual activities constantly influence and re-shape each other. Physical actions of an individual are guided by mental instructions that are often results of mental processes involving both parts. Individual mind, in particular the animal instinct, tends to be self-centered and self-serving. It puts by default the self-interest of the individual ahead of other entities of the world. This is the principle of self-interest.

1.1. Physical Preservation. The first embedded purpose of animal instinct is self physical preservation. For an individual human body, there appears to be an equilibrium state, to which the state of a human body have to stay reasonably close. Moving sufficiently far away from this pre-assumed equilibrium state, the physical body would decompose, and the individual would cease to exist. To maintain his/her physical body in a state that is as close as possible to this pre-assumed equilibrium constitutes the original motivation and the ultimate purpose of a substantial part,
though not all, of individual human activity. Physical existence, after all, is a necessity of all individual human activity.

An individual needs to frequently interact with the outside world to stay close to the pre-assumed equilibrium state. The physical environment and the state of the body are monitored by the mind through the physical sensors of the body. When the physical body is in an environment or a state that is unfavorable for its self-preservation, the emotional part of the mental process would be stimulated to react, driving and working with the intellectual part to form a plan of reaction to deal with the current physical situation. Activities guided by such plan would then follow.

The way in which the emotional mental activities is stimulated to action about a unfavorable physical situation for self-preservation is mainly through mental feelings that are *negatives*. This is to say that the emotional mental activity is, in such situation, stimulated to activity by mental feelings that are not desirable, such as pain, hunger, etc. Negative mental feelings are the mental reflections of such physical states we call *suffering*.

Here is the fundamental tragedy of life. We are brought into existence, and the desire to continue to exist is an intrinsic property that is hard wired by natural design in each individual: we desire and struggle for our existence and we fear and fight death. However, it is also a hard fact that, as time goes, individual physical body will inevitably move away from the pre-assumed equilibrium state, and cease to exist. We might, through our struggle, to somewhat prolong our existence. But physically, and mentally as a consequence, we will all decompose therefore cease to exist in the long run. To make it worse, the occurrence of a threatening physical condition is conveyed to the individual mind by a design through negatives. We could find ways to avoid short term shifting away from that equilibrium state, therefore to reduce the need of a frequent unpleasant reminder of bad physical situations (this is to say, to reduce the human suffering). But human suffering as the default design for the purpose of stimulating actions for individual physical preservation is intrinsic and can only be reduced to certain degree.

Within this fundamental tragedy, there is also a fundamental justice and fairness of life: whatever in store for an individual, he/she only have this much to enjoy, this much to suffer, and this much to experience. At the end, we are all dead in less than, say at the moment, one hundred years of time.

1.2. Biological Preservation. Biological preservation is the second embedded purpose of animal instinct. Individual biological preservation is accomplished through a more complicated process involving the collaboration of two individuals of somewhat different physical and mental design. It is achieved in two steps: first the makings of the biological offsprings then the physical preservation of the acquired. Offsprings are new independent entities. They need time and support to become, mentally and physically, matured and self-sustainable individuals.

The default mental designs for biological preservation are *sexual urge* for reproduction and *parental mandate* for the support of the offsprings, both are intrinsic, embedded in the individual mind as part of the animal instinct. These two designs are both *original* in the sense that they, not the purpose they intended to serve, are hard-wired in mind. For individuals, the urge leading to sexual activity does not
necessarily have anything to do with the desire or the need to acquiring an offspring. Parents will do what they could to take care of their fatally sick child without the perspective that the child would ever grow to maturity.

Sexual urge and sexual activity, as part of the animal instinct, are addressed mainly through *positives*. For individual human being (and perhaps for all other animals in the world as well), sexual urge is not stimulated by suffering and failure, as in the case for physical preservation, but by pleasure and fulfillment. For a matured individual, sexual urge is basically an accumulative, default tendency towards certain highly desirable mental and physical states. Sexual urge and the activities associated to it is *exotic*. They, by default, are mental feelings reflecting desirable physical situations, and such mental feelings and the physical situations they reflect we would call as *pleasure*.

Parental mandate is the default design that induces matured individuals to support their biological offsprings. As an exception to the principle of self-interest, parental mandate confuses the interest of his/her offsprings to that of his/her own. It causes the individual mind to set the priority of the physical preservation of his/her biological offsprings more or less equal to that of his/her own. It also addresses the issues of physical and mental development of his/her biological offsprings as an integral part of his/her interest. Parental mandate as an embedded default in individual mind is as fundamental as the sexual urge. Most of the non-selfish feelings of the human mind are derived from parental mandate and are essentially its secondary extensions.

Unlike the inevitable failure of the struggle for individual physical preservation, which is driven through negativity (suffering), biological reproduction is driven through positivity and individual biological preservation is in general an achievable objective. For the majority of individual human being, at the time of their own death, their offsprings are matured, self-sustainable individuals and they will carry the life on. This should be, in a way, regarded as a main purpose of an individual human life. *The purpose is to let the human experience be refreshed in one’s offsprings and to be carried on*, in which he/she does succeed. One might argue that in the long run biological preservation also fails because the Sun will eventually explode and even the Universe will come to an end. But such argument misses a point. For an individual, the world and whatever is in it are only meaningful while he/she exists, and the Universe ceases to exist at the time of his/her death. What happens afterwards has no meaning therefore can neither add nor null what he/she achieved.

1.3. **Human Emotion.** Let us distinguish the mental sensations we call as the *mental feelings* from those embedded in human mind as animal instinct that addresses these feelings. Here we discuss the latter, which we regard as the *raw forms* of individual human emotion. They are embedded as part of the animal instinct of the individual mind, and they are designed not only to react to, but also to actively seek the positives and to actively avoid the negatives stimulated through physical and mental activities. The fundamentals of human emotion urges the individual to actively seeking pleasure, and to avoid pain and suffering. The first we name as its Desire and the second we name as its Fear. The default mental feelings, such as sexual pleasure, parental mandates and pain, are designed to stimulate the mind to react for the purpose of physical and biological preservation. The emotions in raw form, as
default reactions embedded in human mind, however, are designed to directly address these mental feelings, not the purposes they intend to serve.

Human desires, a default drive to seek mental and physical pleasure, are limitless, and are embedded in a rather ironic form. They are originated for the fundamental needs of individual physical and biological preservation and its basic character is to *acquire more*. The essence of the Desire is to have more, and the intensity of a specific desire is proportional to the amount one currently possesses. Your desire for more is worse when you have more.

The game of fulfilling one’s desire is a game of endless pursuit. The desire always points to the things one does not have at the moment, but after the specific object of a desire is acquired, the mind can only hold the sense of fulfillment and pleasure associated to the new possession briefly. Meanwhile, the intensity of the mental experience of the previous fulfillment induces new desire, with an urgency that is proportional to the intensity of the previous fulfillments. If we call the mental state at the fulfillment of a specific desire as *Happiness* and the mental state with a not-yet-fulfilled desire as *Unhappiness*, then the individual’s pursuit to happiness is an endless cycle that, at the best, can only be very briefly fulfilled; and even such brief fulfillment will come back almost immediately to bite.

The limitless nature of the human desire, on the other hand, is also checked by reality, and consequently, the cycle of desire and its fulfillment is not endlessly repeating after all. There will be desires that can not be fulfilled and the perpetual unhappiness associated with it. The number of unfulfilled desires increases and the accompanied unhappiness accumulates as one gets older. The only remedy, as taught by the Buddha, is to fight an internal battle against the desire by human intelligence, and the best possible results of such internal battle is to push the unfulfilled desires and the accompanied unhappiness to the sub-conscious of the mind. This is a remedy of self-deception. Not a bad one to a degree but idiotic if carried to the extreme.

Fear is the raw form of emotion embedded in animal instinct, serving as a spontaneous mental response to negative physical situation. The most feared of the animal instinct of an individual mind is death. Fear drives an individual to act to stay away from the potential source of pain and suffering. The mind constantly look around to try to identify such potential source, from which it tries to stay away. However, suffering as a default of life must happen, and they always start at the infantile stage, often inflicted, sometimes even on purposely, by parents for what appears to the child as serving no proper purpose other than simply hurting him/her. This leads to a conflicting status of mind. First the mind would like to suppress the memory of suffering, in particular the bad ones from the past, into subconscious, but at the same time it needs to be watchful, to remind itself to avoid the sources of such bad experience.

As an intrinsic dark shadow of mind, Fear is a basic emotion opposite to the Desire. Desire is pointed to the possibility of possessing more, and fear is pointed to the possibility of losing what one possesses. The intensity of fear is proportional to the size of the potential losses. Fear would be worse and the physical reaction it spontaneously directs would be more violent if the potential loss is heavier. Desire and Fear co-exist as default designs of animal instinct, and are often mixing together to serve as motivations that drives human activity.
1.4. **Human Intelligence.** The physical sensors of the body send the image of the outside world for the mind to react and to digest. With respect to such input there is a need of spontaneous responses for the mind to guide the immediate actions of the body. There is also an independent need to deal with that constant flow of inputs. The way and the ability of a mind in dealing with the latter is its **intelligence.**

Intelligence exists by default in all animals. However, in animals other than mankind, intelligence is only an issue of secondary importance in the sense that it is not an independent ability that could influence and reshape the emotions dominated by the animal instinct of the mind. In this sense human intelligence is a unique phenomenon.

Let us first recognize the human intelligence itself as intrinsically an **ability** and distinguish it from the tremendous **consequences** of its work.

The first fundamental feature of the human intelligence is its high ability of creating mental objects and mental structure to digest and to organize the raw input it acquired from the physical world. The mind record the results of such mental exercise, not the raw data, for the future references. The second fundamental feature of human intelligence is its ability of induction and deduction based on the mental objects and the structures it created, leading to anticipations and predictions on the reactions of other entities of the world to his/her own physical actions and on the future of his/her physical environment.

The activity of human intelligence, this is, the individual intellectual activity, is dynamic in the sense that it actively looks for and adopts new inputs from the physical sensors that fits the mental structure it created. It is also able to adjust, to create new mental objects and mental structures to accommodate more input data in the case the previous ones are not sufficient. Though often subject to the drive and the influence of the emotions of Desire and Fear, intelligence is an intrinsic and an independent function of a mind. As an ability and a potentiality hard-wired in individual human mind, it is at a much higher capacity than in other animals (because Adam ate the apple?)

The inputs to an individual mind, including the *a priori* of space, time, relationship and logic, are our own reflections of the outside world therefore are already partially subjective. The creations of human intelligence is one step farther away from the physical reality it reflected on. Therefore the connection between the reality and the mental concepts, the mental objects, the mental structures the individual intelligence created are weak. Individual intelligence creates all kinds of ideas and mental images and mental structure of the world that are idiotic, to which there are absolutely no correspondences in reality. Of which, most of the things discussed in this essay probably could serve as an example. It also makes all kind of false predictions based on such nonsense. Leaving to an individual, the direct fruits of intellectual activities would be, overall, ridiculous. They ought to have little chance to become a serious part of the mind in the decision making process that guides the individual physical activity.

What has made the difference for human intelligence, the ability of which is at a high enough level, is that some of its intellectual anticipations, in occasions, point to physical actions that are different from those offered by the spontaneous responses of the animal instinct, but they yield much better results in addressing the issues
of individual physical and biological preservation. In addition, natural has allowed individual human intelligence worked collectively and it also allowed the results of such work, particular those benefit the purpose of physical and biological preservation, to be preserved and inherited from generations to generations for mankind. Individually and collectively, the possession and the use of this collective and accumulative body of the results of human intellectual activities are the main reasons why the mankind appears doing much better than all other animals of the world in addressing the issues related to physical and biological preservations. Or are we really?

Let us leave the discussion of the natural and the ultimate impact of this collective and accumulative product of human intellectual activity for later and focus for the moment on the issue of the state and the activity of human intellect as part of an individual mind in the modern world. Starting from the infantile stage, a not-yet-matured individual would interact with the physical world outside. He/she is subjected to his/her physical environment, in which the body and the mind grow together gradually to maturity. For his/her mind, there is a huge body of existing product of the past human intellectual activity, part of which he/she is exposed to, and part of which he/she is ready, or even be forced, to absorb. Interacting physically with the unique environment he/she is subjected to and under the influence of the basic human emotion, the ability of which are both in development, his/her intelligence digests and works on the specific portion of the past knowledge he/she acquired, using it to collaborate with, to shape and to be shaped by, his/her basic emotions and his/her physical experiences. At the time of maturity, his/her intelligence has acquired not only an independent status, but also become the instructive function of his mind to make decisions that guides his/her mental and physical activity.

The intellectual activities of a matured human being has the following aspects:

(a) It takes the intellectual activity in pure form, that is, to create mental concepts, to develop mental structure, and to fit such mental creations to the data it collected from the world, as a motivation and a drive. It found internal pleasure in such activities and, consequently, create due emotional feelings that is associated to such activity and even assign to it a priority that is not necessarily low.

(b) It strengthens the development of certain aspect of the default feelings, which are originated from our animal instinct. Again, though these default feelings are designed to serves the purpose of individual physical and biological preservation, they do have an independent existence, with which human intelligence would interact, and upon which it would nurture using its creative and logical power. Such exercise enhances, broadens and deepens the spectrum of human feelings. The desire for feelings created or reshaped by the intelligence would acquire a status and a priority, which is entirely up to the individual to assign. In occasions, it could be set to equal or to even overcome the original animal instinct of physical and biological preservation, though such are rare.

(c) Individual human intelligence, though is with the ability of working creatively and independently, are still driven mostly by the Desire and the Fear of our animal instinct and its activities are still mostly motivated to address its direct physical and mental desire due to the animal instinct of physical and biological preservation, though our mind sometimes twist the motivation in strange and convoluted fashions.
Such is a necessity in particularly in the case that the needs of individual animal instinct are in conflict with the intellectual structures that are regarded as fundamental established earlier by the intelligence of that individual.

Intellectual activities of an individual mind are always a mix of the three, with different proportionality in each individual. In general, (c) is much more than (b) and (b) is much more than (a).

Let us, on the other hand, do not forget that, in comparison to the complexity of the outside world one faces, individual human intelligence, the capacity of which though much higher than other animals, is next to almost nothing and are intrinsically far from adequate in handling the complexity of the world in a consistent fashion. The mental structures that have been created so far by human intelligence are at the best piece meal, local, and often lack of clarity and intrinsic logic consistency. To overrate the capacity of human intelligence and to push any one of the mental structures it created to its logical extreme would inevitably lead to internal mental conflict, to idiocy and to madness. The awareness of the severe limitations of human intelligence is an antidote to such madness.

To discuss the intrinsics of individual human activity, it is necessary to assume certain fundamental resemblances among the majority of individual humans of the world. There are certain intrinsic traits, mentally and physically, they all share. However, the natural born abilities of such traits vary in different individuals, each also subjected to a unique physical circumstance that is constantly shifting in time. The different combinations of potentials of these traits in each individual, and his/her unique experience in the physical world, produce different, very often opposite mental and physical results. This rich variety of resulted individuality and their interactions are much more complex in humans than in other animals, mostly thanks to the human intelligence. It is the source of the drama of the mankind that was, that is, and that is going to be.

2. External Impositions

An individual is first brought into existence and then brought up to maturity in a human society, which is a mass of individuals, organized to deal, collectively, with the world of nature to address the issues of their life, mainly the issues of physical and biological preservation. This human society, as a physical reality, is imposing in the sense that an individual can only address the issues of his/her physical and biological preservation by being a member of the society in an existing framework, in which there are established rules of conduct the individual must obey (the law), and directives of conduct the individual are encouraged to follow (the ethics and the tradition). In history, and even nowadays in different part of the world, human societies have been organized in various forms, each of which are with its own rules and directives. Our focus here is the general features of such impositions on individuals in a modern society, such as the United States of America.

2.1. The Stage of Preparations. Before coming to maturity, the society has had a substantial impact on, physically and mentally, the growth of the youngsters, both as a default background and as a participating force. When the individual comes to maturity, the society has done the following through its educational system.
(1) The fundamentals of the rules and the directives of individual conduct have been taught. It is at least partially successful in embedding those rules and directives in the intellectual part of the individual mind, therefore they become an integral part of the mind in its decision making process. At the very least, it made the individual aware the negative consequences if the rules are not followed.

(2) The human society has tried to introduce to the youngsters, collectively, the various product of past human intelligence it deemed useful for the future of their matured life and the future of the human society, including an overall picture on the nature of the environment of the mankind, of the human society, and of themselves as individuals.

(3) It also accomplished a rough classification of all its youngsters that would have a non-trivial impact on their future status in the society. An individual will need to become a regular functionary of the society to become self-sustained. But one might find that his/her choices are much narrower than others in what he/she can do as a consequence of this classification.

We caution that, besides the biologically inherited differences in individual abilities, the quality of education a youngster receives and the physical environment in which the youngster grows, therefore the actually standing of this youngster at the end of this preparatory process, depends also greatly on the financial and the social status of the parents. Therefore starting from the very beginning, life is not a fair game. On the other hand, it is also a fact that, comparing to the human society in the past, or at the present in developing countries, the modern society is a much fairer place. After all, this specific unfairness of the modern society is to a degree intrinsic. It is derived from parental mandate and the fact that differentials in financial and social status of the matured individuals in a society is an inevitability. A society in which all members have the same financial and social status is an idiotic dream. If nothing else, the biologically inherited differences in individual ability and the self-serving natural of the individuals would introduce inequality.

2.2. Acquisition of Money. To address the need for individual physical and biological preservation and to fulfill the other individual desires, a matured individual in the modern society found that, though not sufficient, it is an absolute necessity to acquire Money.

There are many sub-organizations in the society, which we would call as its economic units, the size of which, counting the number of individuals involved, varies from very small to huge. Each of the units has their own unique way to acquire money from other units and the individuals of the society by providing something that is deemed desirable by other units or the individuals.

For an individual, the most direct way to acquire money is to join one of the established units, where one fits into a position that requires regular performance of a specific function. It is up to the individual to decide which economic unit he/she wants to get into, but it is not up to the individual to decide if he/she could be accepted. As a general rule, these one could easily get into is less attractive (because they offer less money, without much chance for future growth, and so on). Those look attractive are harder to get into. Here the standing in the rough classification one receives at the end of the preparatory stage would play a substantial role in
determining where one could get started. An individual also has the option to start his/her own economic unit. This way of acquiring money is much less predictable. It takes much more, in terms of effort, ability, and sometimes luck, to establish a new economic unit. In such independent venture, one is most likely to fail, or somehow be able to keep it going, struggling to make a small amount of money to survive. There is also the possibility that his unit become established, in which he found himself at the top of an established economic unit.

Within an economic unit there are ladders of positions, one of which the starting individual is positioned in, usually located relatively low. The ladders are designed in a way to urge all individuals involved to climb upwards, but the number of positions is lesser at higher levels so only a small fraction of individuals can move up at every level. The individuals are urged to move up because (1) the amount of money acquired is more in general for those in higher positions, and (2) those in higher position dictates what the individuals in lower level are supposed to do and they also evaluate constantly the performance of people at lower level to decide if a specific individual should be moved up, kept at the same level, moved down or even let go. It is, in general, up to the individual if he/she decides to leave a specific economic unit, but it is up to these in higher positions, to at the least a high degree, to decide if he/she is allowed to stay. What is described here is the generals of the power structure embedded, with variation and modifications, in all economic units.

Therefore a matured individual is now thrown into an endless struggle of maintaining his position or moving higher. Now the default character of individual human desire is kicked in. The higher one moves to, the stronger the desire to move even higher, to acquire more money and more power. Majority of individuals would have to remain low, ever struggling to stay in those low positions, to be kicked around by those positioned higher, only to be allowed to acquire moderate amount of money to meet the end of their family’s kitchen table. Some move higher, even are able to quickly accumulate enough money to cover the basic needs for the rest of their life. They, however, desire to move higher, and desire to acquire more, for the intensity of the urge to have more for the blind purpose of having more is ever growing inside. At the same time, the possibility of fall-off the ladder therefore loss what they possess stimulates fear, which also increases in intensity as one gets higher and is in possession of more. Pursuit of happiness, that is, to fulfill what one desires, is a fundamental and a never ending drive of life. Unhappiness is the reflection of struggles resulted in unfulfilled desires. These climbed higher are actually accompanied with more unhappiness, more stress and fear. At the end, then, who is happier? Those who are kicked around or those who kick others around?

2.3. Formation of Family. The formation of a family, consists of a male, a female and their not-yet-matured offsprings, makes perfect sense as a default way to address the issues of individual biological preservation. Sexual intercourse of a male and a female produce offsprings, and the confusion of the principle of individual self-interest imposed by parental mandate is naturally extended, to a degree, to the partner, for many of the individual interest of the partner coincide with the interest of the offsprings. The need of collaboration in supporting the common biological offsprings get the two together more frequently, and the spontaneous nature of the sexual urge
then re-enforces the existing sexual relationship, forming a bond between the two with a tendency to be exclusive.

Among the four options: one male to one female, one male to multi-female, multi-male to one female and multi-male to multi-female, the last two are obstructive to the parental mandate for the male, for such arrangement would hinder him from identifying his own biological offsprings. The second and the third options are by default not as stable as the first because of the mis-match of the sexual needs of one to many. The last three options are all subjected also to the tension created by the conflict of self-interest of the multi-females or multi-males involved. Consequently, the last two arrangements are possible only if they are necessities for individual physical preservation, which is the only default with a higher priority than biological preservation. The second can only exist as an uncommon option even in a male dominated society unless there is a situation in which the male-female ratio are exceedingly unbalanced. Therefore the first option is destined to prevail, supported also by the statistical fact that in human reproduction, the ratio of male and female are at rough balance.

The exclusiveness of the relationship of the two matured individuals, however, is a derived property. It is not one of the imposing animal instinct and, if standing on its own, is not always among the highest priority for individual judgement guided by the principle of self-interest. The bond would get stronger, even reaching to a level at which the principle of self-interest is somewhat confused in between the two, when the exclusive bond and the other imposing defaults of the two collaborate. It would become weaker, actually not so hard to reach a break point if the imposing defaults of the two are in conflict.

The society from which the modern society is evolved from, taking family not only as basic unit for the purpose of biological preservation but also as basic unit for its economic activities (which is no longer the case in the modern society), are extremely imposing about maintaining this intrinsically weak bond. To maintain the stability of families as a basic social unit, on which the entire social and economic structure are built on, had been regarded, and been treated, as an issue of highest priority. Such imposing attitude, the influence of which remains to certain degree as part of tradition, has been greatly relaxed in modern society.

Society is formed to address mainly the issues related to individual physical preservation. Its ultimate concern is its economic activity. Since family is no longer the basic unit for the economic activity, the modern society is no longer interested in to be imposing on the formation and the stability of the families, as far as the issues concerning individual biological preservation are taken care of. Therefore, instead of being imposing on the intrinsically weak bond, that is, the exclusiveness of the sexual relationship of the two involved, it turned its attention to the second stage, the support of the offsprings. An issue that is indefinitely easier to handle because the purpose now collaborates with a natural default. If the biological parents can not agree upon how to share the responsibility in supporting their not-yet-matured offsprings, then the society would step in to decide the responsibilities of the parties involved, and its decision is imposing. Families constituting one matured male and one matured female and their offsprings, as a natural arrangement derived from sexual urge and parental mandate, are still, and will remain as the basic unit in the
organizations of a human society. However, up to the volunteering decisions of the two involved, existing families are constantly dissolving, and new families are then constantly forming.