Development speed of forces

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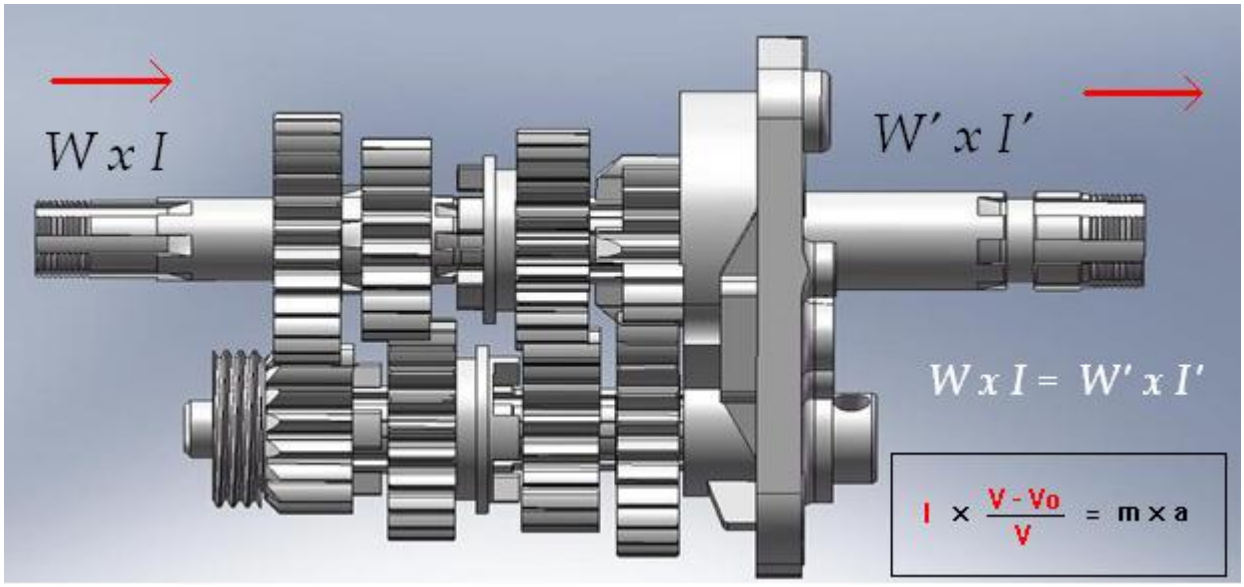
Characteristics of Forces



Error in the Principles of inertial mass and invariance in the speed of light

To my understanding, two of the errors made by Einstein and accepted in general by the current physics (which are the increase of the inertial mass and the invariance of the speed of light on any reference frame) they come from the ignorance of some characteristics of the vectors of force.

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To understand these errors it would be necessary to establish (and to explain) a basic principle in the study of the vectors of force, which would be:

"Instantaneous forces don't exist; all the forces have an execution speed"

$$I \times \frac{V - Vo}{V} = m \times a$$

FORCE is synonymous of dragging action. Then each type and class of force must have its own Intensity and its own Execution Speed.

If we don't understand or know this principle, we can fall in the error of ask us some questions and later to get inadequate solutions to phenomena of forces (resulting apply-inertia) as it can happen when trying to accelerate a body until the speed of light, believing wronging that if we are not able to overcome this speed then what happens it is we are converting the applied force to the object into inertial mass. And this is not this way.

What really happens is that all applied force has (beside of its direction) two main components that are the **intensity I** and the **execution velocity V** , with which we could put as initial formula **Fa = I x V,**** where Fa is the applied force in any moment, I the intensity of the force and V the speed of execution of this force.

** **Fa = I x V :** This can be demonstrated in machines (pulley, lever, gearbox, etc.) when given a force Fa, we can increase any of its parameter (V, I) decreasing the other one in the same proportion; for example, in the gearbox when we increase the speed V, decreasing the power I. Applying to a body that goes acquiring a speed Vo, this formula is translated into the following one:

$$Fa = I \times [(V - Vo) / V]$$

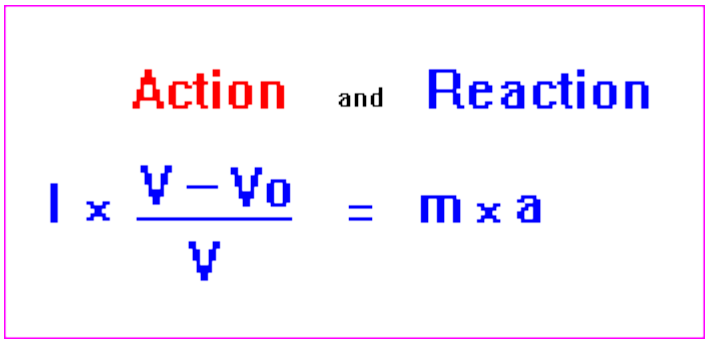
This wants to tell us that if to a body we impel it an initial force with intensity I, when this body goes taking speed the applied force Fa goes diminishing until being null when the object acquires the execution speed V of this force. When Vo = V.
As examples of them we can mention:
--A train-machine can apply a force of high intensity to any object, but this force also has an execution speed, in such a way that when the crawled object arrives to the speed that the machine takes place, this object can no longer continue accelerating.
--A rifle bullet will take less intensity than the train-machine, but its execution speed will be very bigger, and so, it can crawl to any little object to very bigger speed than the train-machine.
--If we throw a timber into the water in a river, this will begin accelerating, but when it arrives to the speed of water, it will no longer be able to reach bigger speed because it will have arrived to the speed of execution of the stream.
--If we hit a billiard ball with a great tractor (which power it is enormous) but that goes to a speed of 1 metre/minute, we see that the ball gets and maintains a speed of a metre/minute. However if we (ourselves) hit it with a cue to great speed, we see that this ball acquires that speed.
And all the forces that we study act this way. All they have their maximum speed of execution. Now well, in the speed of light and the whole energy and fields of force of the Cosmos happen the same thing, all they have a speed of execution of 300.000 km/s. and arrived to this speed they are no longer able to accelerate more to any object.
Therefore, when to an object we apply a force treating that this object overcomes the speed of light and this doesn't get it, this question doesn't mean that the applied force becomes mass inertial, but rather we simply are not applying it any force when going the object to the speed of execution of the cosmic force (gravity, magnetism) that we are applying it.

As we see, in the fields of force (gravitational or magnetic that can resemble streams or flows that crawl any object), it is where this component or execution speed of forces is better appreciated. In such a way that if these fields whose execution speed is of 300.000 km/s. (proportion of union between space and time in the creation of the cosmic energy), hypothetically we could surpass this speed, then not alone these fields of force could not accelerate us but rather they would retain us although we were in their same direction.

Now then, in the Newton formula **F = m x a** , the force F represents the force Fa that the mass uses to move and not the intensity and nature of this force, included its execution speed.
To come closer a little more of the characteristics of any force, it would be necessary to include the differential before mentioned [(V-Vo) / V] so this way to know better the intensity and execution speed of any force, we can the following formula:

$$\mathbf{I = m.\ a.\ [(V / (V-Vo)].}$$

A important question to take in mind is that we should differentiate the force and its results clearly, that is to say, **the action of applied force** apart from **the reaction** that takes place in the object that we try to move.
I put this way the following formula to clarify the characteristics of motion in vectors of froces:



Advice: In these formulas I maintain the lineal character in the speed of forces and not their square as it would be of waiting (number of "pulsations" of any of them and differential of their speed), because I understand that the differential that could exist in the speed of any is compensated with the smallest time of working of each pulsation.

A few examples:

Clear examples of the importance of the speed of execution of forces -and of its character of physical parameter- we have them when analyzing forces and their produced momentums.
We would have this way:

---In machines and levers we could put:

$$M' = M'' + y \text{ ---- and consequently ---- } I' \times V' = I'' \times V'' + y$$

That is to say, the applied momentum M' is similar to the resulting one M", plus the produced mechanical loss or wear in the transformation.
Likewise and translating to simple parameters, will we have that the intensity of applied force I' by its speed V' would be similar to the intensity of the resulting force I" by its speed V" plus the mechanical wear y.

In this case, we can appreciate that an interrelation between the two parameters of forces exists, (its **intensity** and its **execution speed**), in such a way that we can diminish or increase in machines and levers a parameter, getting that the other parameter increases or diminishes inversely in the same proportion.

As we see clearly in the machines and levers, the speed of execution of forces V', V', etc. it is a physical parameter, which is a component of forces being at the same time a variable from of potential of the same ones.

---In the crashes and drags, we would have that:

$$M = M' + M'' + y \text{ -- and consequently -- } m \,.\, v = m'.\, v' + m''.\, v'' + y$$

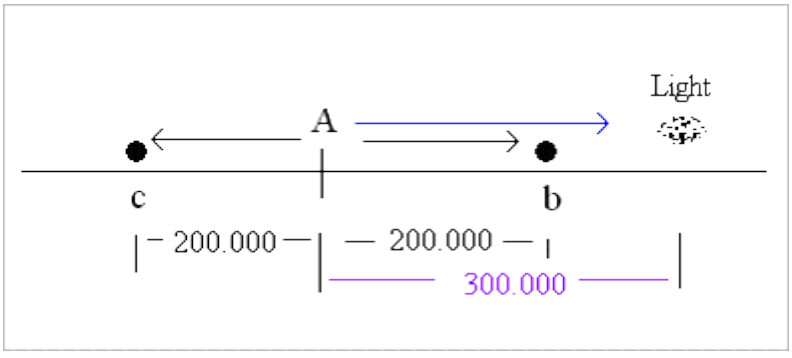
where M are momentums, m masses and v speeds.

That is to say, when a mass in motion takes a momentum M which is applied by means of crash or drag to other masses, this applied momentum is similar to the resultant ones M' + M" + ... plus the mechanical wear y.

Now then, on the contrary as in the machines, in the inertial motions of masses, these masses are invariable elements and therefore the variable parameter for the transmission of forces has to be the speed of development of these forces.
---This way if we have two equal masses that crash frontally, we have that the first mass in motion transmits all its momentum to the second mass with which collides.
This second mass acquires the whole impelling momentum from the first mass, acquiring (don't taking in mind the mechanical wear (d.t.m.w.)) the same execution speed that took the primary mass.
---If the first impelling mass is smaller than the second or impelled one, logically (d.t.m.w.) the resulting momentum would be also same to the impeller ones, but being biggest the secondary mass than de first impelling ones, it would be that the execution speed would diminish proportionally to the differential between these masses.
---If the impelling mass is bigger than the secondary or impelled mass, (d.t.m.w.) we would have that the resulting mass will acquires the same speed of execution of the first impelling mass, and therefore being less its mass, its momentum would be smaller than the momentum that brought the first impelling mass.
In this case, the first impelling mass will give part its momentum to the second impelled one, and the first will conserve part of its momentum for it. This way the first mass will continue moving with smaller momentum and therefore smaller execution speed.
In the case of crashes and drags we also see that the speed of execution of forces is a physical parameter that composes and structures any forces.

Invariance in the speed of light

On the other hand, there are many easy examples that demonstrate without any doubt that the speed of light is not the same for all the reference frames. This is true alone regarding to the emission source.
I can put here an easy one:
***** If we rush by means of a simultaneous device (and from a common point A) two rockets to very high speed 200.000 km/s. (one b toward the north and another c to the south) and a luminous impulse toward the north next to the rocket that goes in that direction, will have that:
--Past one second, the luminous impulse will have travelled 300.000 km. toward the north. --The rocket b will have travelled 200.000 toward the north and it will be therefore to 100.000 km of the impulse of light.
--The rocket c will have travelled 200.000 km toward the south and it will be to 500.000 km. of the luminous impulse.



Therefore we see that the distances among the light impulse and the reference frames, A, b and c are completely different and therefore the speed of the luminous impulse with regard to them is different also.
As we see, in extreme cases, as for instance, two luminous impulses in contrary sense, the light can reach up 600.000 km/s. if we use these luminous impulses as reference frames.
This way, and with very much respect toward those that defend the invariance of the light toward all the reference frames, my opinion is that this postulate is erroneous.
And the demonstrations that tend to demonstrate it are not well interpreted.
This case is the Michelson-Morley experiment in which the different parameters are not adjusted appropriately.
To know:
-- The increase of the speed of light (in the two arms) with the speed of turn of the device.
-- Different flights (going and turn) in the arm that circulates in direction to the turn of the device.
-- Vertical displacement of the flights of the light in the perpendicular arm, due to the speed of the device applied to the luminous ray.

Point out on types of force:

Fields and vectors of force.

As I explain in Structural Cosmology (1992) the Cosmos energy, so much the primary energy which is the gravity, as its resulting one (rebalance force) which is the magnetism, they spread through space in form of energy fields.
Because well these energy fields or fields of force are the primary manifestations of the Cosmos energy.
But a secondary manifestation of force exists, which is consequence and produced in first place by a field of force, but it is manifested in second place as a vector of force.
This way (sequentially for its understanding) we can follow the path of the application of a force from a field of force until its manifestation as vector of force with the following examples:
1.-
We leave to fall freely a spherical mass from certain altitude, which will hit laterally when arriving to the floor against another sphere that will acquire a movement on the surface due to this crash. This case, the first sphere is impelled by a field of force that is gravity, and the second are impelled by a vector of force which is the moment **m x v** of the first sphere, which is executed alone in a point of the second sphere.
And this it is the great difference between field and vectors of forces: The field of forces are authentic and autonomous forces and also external to the masses to on which these field are applied, and as general rule, they are transmitted to all and each one of the points of this mass. Against, the vectors of force go inside the matter that bears them in form of kinetic energy or momentum and they can be applied alone on a point of the object to which is transmitted.
2.-
If we hit with a cue to a billiards ball which hits successively to other, we will have that in the first place the force that we apply come from fields of force which are the magnetic fields of the atoms and molecules of our specific muscular proteins that try to return to its rebalance after the molecular changes produced due to the movement of the muscle.
The changes in the proteins already produce the impulse of the muscle in form of serials vectors of forces; firstly to our arm; our arm to the cue that impulse ball, which will continue also impelling to the other ones by means of vectors of force.

This way and summarizing, motions always take place by means of fields of force and later the masses that are impelled in turn can impel others by means of vectors of force.

Fields of forces

The fields of force, as I have pointed, have the particularity of being applied to all and each one of the points of the object that must move.
This, and not other, it is the reason for which the bodies, crawled by a field of force, have the same acceleration, independently of their size or mass:
"Because the force is applied individually all and each one its points, in such a way that the field of force apply bigger number of impulses in bigger masses that have more points of mass." This way, bigger mass has bigger applied force, and so, equal acceleration.
We could put as indicative formula: **N x I = n x a**
Where **N** is the number of points of mass; **n** the number of impulses of the field; **I** the intensity of the field and **a** the resulting acceleration.
As we have said, the fields of force **N** and **n** are equal (for each point of mass--an impulse of force) then the acceleration to of the object it is always directly proportional to the intensity I of the field independently of the dimension of the object.
When it is necessary to keep in mind the speed of the object that moves inside the field of forces, to the previous simple formula we have to include the differential of speed of the force, and it would be:

$$I \times [(V - Vo) / V] = a$$

Scalars of time and space

When I contradict the relativity postulates of Einstein, also I often expose and his great intuition. At the end I use to conclude that:
"Einstein had a great intuition and a bad resolution in his postulates."
Now well, to my to understand another bad resolution of his great intuition it was the one with respect to the definition and postulation of the differential in the local times.
As for I understand the question, which I have explained in the topic of the simultaneity:
"For two reference frames or two distant systems of time and motion that are observed separately, an apparent disconnection, discontinuity or locality can exist, but there will always be a superior system that contains and include to these two reference frames in which is proven clearly that this discontinuity doesn't exist and that the whole space and time are stationary and continuous for both reference frames."
This means that the locality or discontinuity of space or time doesn't exist.
This definition or principle on the space and time tells us that a medium infinitely great of space exists and an medium infinitely large of time also exists in which any space or local time are included and therefore these space-time local can be measured as completely stationary and invariable regarding the entirety of the space-time.
Now then, the whole space and time of the Cosmos melt giving us the cosmic energy, matter and all motion that take place in the Cosmos.
This case, so much the cosmic energy (gravity), matter or the forces and motions (that this energy produces) can be concentrates, to be added, opposed, etc., and even they can influence some in others.
But it is always changes at levels of energy, matter, forces or motion, but they never influence in space and time, which are the primary and unalterable elements of the Cosmos.

Secondary elements of the Cosmos (energy, matter; forces, motions, speeds) never can influence in the primary elements as they are space and time.
Then, we can say the secondary elements can have different density through space, but primary elements are stationary through space.
Now then, as so much time as space complete the mathematical laws, included the exponential or scalar one. That means that we can choose in the space or time infinitely big or infinitely small units according to our necessities. And these cases, according to the unit that we take, we will be this way studying and observing different cosmic elements.
In relation to space, if we take years light we will be observing stars and galaxies; and if we take angstroms **-or atomic metres** Amt = 10^-23 metres-("Vital space in the atomic level") we will be observing atoms and molecules.
And in time the same thing happens: If besides choosing atomic metres Amt, we choose times units of atoms **atomic seconds** Asc = 10^-23 seconds ("vital time at atomic level"), we will be living on an electron and being studied its rotation movement (annual) around the atomic nucleus.
And here seem to be the main problem that physicists have today; that they don't take in mind the scalar time and they try to see in one second the trillion turns that an electron gives for second; or the trillions of positions and changes that any unstable particle travels or takes place in one second, all which is not possible to measure because our time of "reaction or observation" it is infinitely bigger than their time of performance.
----In the same sense, the scalar property of space is not considered when adjusting the gravitation in atoms, which (together the ignorance of the integration effect) makes that the modern physics considers separately two atomic forces (Strong forced and gravity) when in fact it is the same one. To adjust the gravitation in the atomic nuclei it is necessary to consider atomic space units that are very small, and their square until our level or distance from these atomic nuclei that is enormous, in order of 10^46.

The Cosmos Uniformity

The human egocentrism in Physics

In almost all the times of our history, some egocentric topics and considerations have existed on the nature of the physical phenomena, where almost always the human beings are consider as the centre of the creation, and to Physics, as a dependent entity subject to our own existence.
Not a lot of time back, we believed that the whole Universe rotated around us, around our planet.
Nevertheless, many scientists as Newton, Darwin, etc., they have tried to draw us the Universe from a simple physical perspective, without that dependence of the human being existence.
However new scientists and points of view return again, which try to locate us (the humans and our dimensional medium) as reference frame, forcing this way the performance and behaviour of the Cosmos as for our own existence.
At the moment (principles of the 2000) so quantity of egocentric theories exist that when it is to look from a point of extra-humanoid view, one-me feels certain stupor for the disregard and manipulation that it is made in the theoretical physics in our days.
Since Einstein supported that disastrous premise "the simultaneity (speed, direction, time, space, etc.) all they depend on a located observer...."; starting from then all the phenomena and physical laws have depended on an observer (a person, of course) and they have stopped to have their own properties and characteristic.

So today, scientists say that the phenomena and physical elements (space, time, energy, physical laws, etc.) have different behaviour if they take place in our nearly medium where we can observe them and measuring them, or if they take place far from our observation.
--- This way to the speed of light the time falls, the energy and mass increase, etc.
--- In our observable medium, the laws that work are the Newton laws.
On the other hand in atoms the new laws are those of the quantum mechanics establishes, that is to say, in they don't act gravity, physical forces, momentums, directions, etc., even neither the own existence of the particles, since they are usually virtual -or inexistent if we don't are observing them-
And what are the laws of the quantum mechanics? Because formulas that we invent to manage the microcosms.
So, not alone the cosmic phenomena depend on an observer, but rather that observer also creates formulas that can manage the Cosmos.

---Besides these anterior questions, we also have very distant to us, the phenomenon of the black holes, where not only the classic mechanics doesn't act, but neither the quantum mechanics.

Well, it is not a pitiless critic against the new tendencies on physics, but simply to verify a fact with which I don't agree, because I estimate that in all and in each of the Cosmos places the same forces act and in the same way.
All this due to their essential elements are the same ones: **Space and time** that builds energy, mass and matter, -and so, forces and momentums-, all them completing the universal physical laws in any place and level of the Cosmos.
All this can see very simplified in my work on the Cosmos Model.
Therefore, and according to my cosmological theories, we can consider to the Cosmos UNIFORMITY as a property and characteristic of the same one, which would define the Cosmos as uniform and similar in the performance and behaviour of all their elements and physical laws in any place and level that we could consider, existing the same performance laws as much in the macrocosms as in the microcosms, as well as, the tendency to the uniformity in the energy and matter allotment through the whole Cosmos, as you deduces from the Law of Universal Balance.