

Possibilities of Existence of a Third Force J In Between Action and Reaction Forces of Newton

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Abstract— In this research paper, the spite of action and reaction forces in case of Newton's third law of motion there is a third force which plays vital role in the sustainability of any body. This force makes able the body to resist its shape in spite of the existing intermolecular forces. As long as the angle of responding the applying forces increases, value of reactionary forces decreases even with its components. Macro and Micro spectrum of air particle spreaded in the Universe protect the body as a plasma layer, angle β , force F give burn a new magnitude of force J which is plays decisive role and may be taken as the guiding factor to save the physical structure of a body. Values of this $J = K(F+\beta)^n$ where K= is the repetition of the frequency ranging from the whole number domain. n is supposed as the number of trial of any strike of any magnitude of a variable force during a certain moment provided no additional lubricants or viscous material is supplied during the application of these action and reaction of the forces.

Keywords— Force, Responding Force, Adhesive, Cohesive, Perpendicular, Third Force.

I. INTRODUCTION

The concept that to every action there is equal and opposite reaction is such a popularized fact for the common masses that in every aspect of life even people start to talk about this motion based law of Sir Isaac Newton. Force of collision between bodies to another body is evident fact. If the pair of bodies are solids, one solid another of tensile nature, one is solid another is of compressibility level low matter. These all are the cases when force of action and force of reaction plays their role about the magnitude of the forces vary and time factor also exert different numeric exit result. That exit of force between the collisions of solid body to a solid body and solid body to other also affects the magnitudes of responding forces coming out. Value or value of amount of momentum of forces after collision changes. We also know that there happens an exchange of momentum of these two colliding bodies .Before and after collision the total conservation of momentum of the body remains constant in numeric stage. Let us take an example a car is colliding to a bus in the head on collision stage in speed of 40 km of speed. If on coming very close to each other both car and car and bus drivers are making their hard attempt to escape this head on collision accident scene then and lastly they collide with a velocity of 1 km / hour speed .One can easily notice that heads of both of the vehicles seems to be attached with each other and there is noticing a severe and measure damage in the physical shape of the car.One can say that this happened due to

exchange of the momentum of the bodies came into the contact during collision. Now we can imagine the same physical phenomenon as that one car is at rest and bus in the speed of 60 km /hours and it may be noticed that car has be derailed from the actual path and again has got measure loss in the structure of the bus and car. No need to say that here higher momentum of the bus has been transferred to the car that reshaped the car having low momentum. As it is the known fact that product of the mass and velocity is known as momentum.

II. METHODOLOGICAL CALCULATION

Let us consider the Binomial expansion and for any value of n, whether positive, negative, integer or non-integer, the value of the nth power of a binomial is given by:

$$(a + b)^n = a^n + na^{n-1}b + \frac{n(n-1)}{2}a^{n-2}b^2 + \dots + b^n$$

Here every coefficients of a and b are certain numeric value .Here n may be taken as the number of strikes that is supposed as the force of frequencies of repetition of this process. Here we are considering a as the force of action where as b as the force of reaction and validation of this result of Binomial is possible when number of repetition of frequencies of force of action and force of reaction is a natural value in the general case or in the particular case it may be any integral values positive or negative.

But reality is different as no one can claim that the impulse of force and the effect of a force applied during the process of action and reaction is always an integral value, if value n is an irrational number as the square root of 2,3,5,7,11-----, in that case this expansion is not possible and total effect of action and reaction of a force is not in the zone of an interval of derivable function. As till this moment expansion of Binomial is quite impossible for irrational index. This is leading to another aspect that of thinking rather than force of action and reaction. A third force J is hypothesized here that can manage the result in case of other force of action and reaction when an integral value does not come before.

III. CONCLUSION

By the Newton's 2nd law of motion it is said that $F = m \cdot a$. Where F = Force applied on the body, m = Mass of the body and a = Acceleration of the body in the motion.

Typically this result says nothing about the nature of the force applied on the body whether it is force of action or force of reaction. Mass of the body on which force is being applied may not be treated always as constant numerically.

Why we do not consider the magnitude of the thermo dynamical changes that results to the change in the mass of anybody on which an external force is applied. Process of Nuclear fission and Fusion take place in the atoms of the compact mass of taken body on which this experiment is being performed and supposed body. When any force is applied even for a giga second. If we take a Binomial expression $x+y$ of composition of forces, where $F=x$ and y is the composition of forces working bin side the body when an external force x is applied. Power of $x+y$ is raised by n where n be any positive integer then a finite sequence is obtained.

Let us imagine that amount of force which has been taken as x in the Binomial expression produce integral values and another force y produces fractional values then final the values of $(x+y)^n$ gets retarded if we supposed n as the pulse of the time to be consumed during the frequent application of the applied forces. Here we see that that matter of equal and opposite reaction is not always valid. If we consider the universality of Newton's Third law of motion then $x = -y$ and finally $x+y$ would be zero. But in the case of Newton's third law forces of action and reaction should equal in nature and opposite in the magnitude.

Finally there is no significance of the Binomial expansion $(x+y)^n$. It seems that there is possibility of another third force in between the force of action and reaction. This third Force J is supposed as the total sum of all the working forces of action reaction and forces arise due to the process of fission and fission inside the body not only the intermolecular forces but external supposition is also applicable here. If a ball is throw on a wall frequently for continuous 2 minutes then it is not always possible that the sent ball would be coming back in the backward direction adopting the same path. Generally in almost all cases ball changes its direction of path of coming back after colliding from the wall. Now, here again a

question arises that even always equal magnitude force is applied on the wall through the ball not equal magnitude bearing the same ball is coming back. So, the change in the path of the ball indicating a third force that may be equal to the resultant force $x+y$ otherwise there may an alarming and critical situation s for the shape and size of the body. Body may be break, melt or deformed significantly.

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