

Approach to Social Physics

Emad Eldieb

Chairman of Physics Quena University, Egypt
Email: eeldieb@yahoo.com

Abstract – We want to define the human core or to put a distinctive definition for the instant (the human will) and differentiate it from the human behavior.

The instant is internal mass less (or with infinitesimal small mass) transparent entity not perceived by the normal perceptions although we believe its presence. On the other side; the human behavior is a compound entity produced on dealing the instant with all the external circumstances.

The instant is internal minute particle; a fringe like the light fringe which reacts physically, not chemically, with the place and time. Consequently we can apply the physical principles and phenomena of the physical particles and of the light wave on this instant. So we would apply;

- 1- The matter wave and diffraction.
- 2- Uncertainty of Heisenberg
- 3- Time dilatation of Einstein.

Keywords — Matter Wave, Uncertainty, Diffraction, Time Dilation, Human Core.

I. INTRODUCTION

The instant as infinitesimally small entity is the core of the humanity. Because of the core of any thing is always faith, so all the instants had to be faith, yet what we inspect from existence of corrupt spoiled human behaviors make us arrive to the following result;

Most of the instants are faith and only small ratio is evil. The rule of the instants is the faith. The need to explain the phenomenon of the corrupt behaviors of some or even of the most people have to not contradict with the rule, so we have to interpret the spoiled behaviors, even if were much, as production from only few evil instants

The evil instants produce spoiled behaviors. Then what is the product of the faith instants?

The faith instants produce faith and strait behaviors even when they deal with the spoiled behaviors of the other few human beings (because of the faith means necessary, overcome over the weak bad behaviors). But when the spoiled behaviors precipitate and accumulate in the society or when the human beings of the evil instants reach to the authority, the faith instants diffract and may produce spoiled behaviors.

The spoiled behaviors of the society press on the faith instants. The pressure of the majesty comes from its carelessness and stupidity and from its injustice and peremptory, and comes also from arms of the media which take the lie as attitude and take the blood and pain of the people as trade. Hence the instants diffract as the beam of light (or as a beam of particles like electrons) diffract under the pressure of the slit or under the effect of a small hole. When the hole comes narrow and narrow or when the slit comes small and small the pressure increases and the diffraction becomes great. The end result in the society would be;

Most of the instants are faith but also the behaviors of the most of the people are spoiled. Spoiled behaviors because the evil instants produce spoiled behaviors and because of the faith instants when deal with people of spoiled behaviors or when live in a society with spoiled authority diffract and spoil.

In the following discussion we would deal the instants as the physics deal the waves of light or of the particles.

II. DISCUSSION

The matter wave: a particle or a body moving with speed v is accompanied with a wave whose length λ obeys;

$$P \lambda = h$$

Where "p" is the momentum (= mv) and "h" is a very small constant called Planck's constant

From above;

$$\lambda = a / m \quad (1)$$

Where "m" is the mass of the particle and "a" is constant. This relation means that the particles with small masses have considerable long matter waves. Because of we dealt the instant as a transparent light particle (with small mass) so its accompanied wave is long.

The next two physical phenomena are considerable only for the particles with comparative long waves..

Diffraction; Reaction with the Place

A particle passing through a small slit with a width d , would diffract by angle θ as;

$$d \sin \theta = n\lambda$$

For a defined wave length λ and defined wave number n ;

$$d = b / \theta \quad (2)$$

Where, "b" is a constant. So the particle diffracts more when the slit becomes narrower.

If we defined d and n then from the relations (1) and (2) we have;

$$c / m = \theta \quad (3)$$

Where c is a constant and m is the inertial mass. This means that the angle of diffraction depends also on intrinsic property of the particle. So if we want to decrease the angle of diffraction depending on intrinsic property then we have to choose a comparatively massive particle. On the same way we can see diffraction of the instant by applying equation (2).

The instants even the faith ones when pass through out a narrow place (i.e. when deal with the spoiled behaviors of the other people) would diffract and produce evil behaviors. Even the faith instants would diffract more and more when the place becomes narrower and narrower that is when the people with the evil instants reach the authority.

According to equation (3) there are some instants (due to intrinsic property) can resist diffraction.

So in the society and under the effect of the place we would have; some people (small ratio) has evil instants and spoiled behaviors and other some (also small ratio) has faith instants and strait behaviors while the most people have faith instants but spoiled behaviors. This conclusion is built on the rule mentioned in the introduction which stated that most instants are faith, and built also on the effect of diffraction which would give most people with spoiled behaviors.”

Uncertainty; reaction with the time

On 1927 Heisenberg declared the uncertainty principle⁽²⁾. We would focus only on its following form;

$$\Delta t \cdot \Delta E \geq \hbar/2$$

The above form means that the product of the uncertainty of the time Δt and uncertainty of the energy ΔE equal at least the reduced Planck's constant \hbar over two. If we look to the electron of the hydrogen atom along a comparative wide time interval we may see a circular orbit and consequently we can define its total energy, while if we defined a narrow time interval then we would see a zigzag like motion; where the electron in a moment would drop much down towards the nucleus and in another moment would come far away from the nucleus. This undefined irregular motion appears throughout a defined time as irregular undefined instant⁽³⁾. This is the physical reaction of the instant with the time. Throughout a defined comparatively short time interval you can not define the human core i.e. the instant. To approach the correct judge you need to give the human his complete chance throughout all his age (till the moment of moribund).

Time dilation of the relative motions⁽⁴⁾⁽⁵⁾⁽⁶⁾

In the special relativity Einstein stated that the moment interval dilates in an observer moving with speed v relative to a constant observer. When v approaches speed of light c , the moment approaches to stop

Consider a simple clock consisting of two mirrors A and B, between which a light pulse is bouncing. The separation of the mirrors is L and the clock ticks once each time the light pulse hits a given mirror.

In the frame where the clock is at rest the light pulse traces out a path of length $2L$ and the period of the clock is $2L$ divided by the speed of light

$$\Delta t = \frac{2L}{c}$$

From the frame of reference of a moving observer traveling at the speed v relative to the rest frame of the clock the light pulse traces out a longer, angled path. The second postulate of special relativity states that the speed of light is constant in all frames, which implies a lengthening of the period of this clock from the moving observer's perspective. That is to say, in a frame moving relative to the clock, the clock appears to be running more slowly. Straightforward application of the Pythagorean theorem leads to the well-known prediction of special relativity:

The total time for the light pulse to trace its path is given by

$$\Delta t' = \frac{2D}{c}$$

The length of the half path can be calculated as a function of known quantities as

$$D = \sqrt{\left(\frac{1}{2}v\Delta t'\right)^2 + L^2}$$

Substituting D from this equation into the previous and solving for $\Delta t'$ gives:

$$\Delta t' = \frac{\frac{2L}{c}}{\sqrt{1 - \frac{v^2}{c^2}}}$$

and thus, with the definition of Δt :

$$\Delta t' = \frac{\Delta t}{\sqrt{1 - \frac{v^2}{c^2}}}$$

Now, the people always describe the moment of death by the following descriptions; "His soul (instant) fled in the sky". "It ascended to god". These descriptions which should be respected means that on the moment of moribund the instant flies with comparative high speed. This means that the moment of moribund which is the moment of the correct judge would dilate comparative to that of the members of the court. The court moment never catch the moment of the moribund because of the first is smaller than the second. Our brother lied during moribund; his eyes went in all direction and said: You delayed prosecute till the moment of death. But this moment I see now dilated may be for infinite. If the physics of uncertainty gave the human core the chance till the last moment of life, the physics of time dilatation make this moment arrive to infinite. Then can you now give a correct judge about the instant? You can not. Can our warm hands catch the white snow balls?(7) He asked.

III. CONCLUSION

The human instant as the core of the human is a transparent particle looks as any particle, so we can apply on it the physicals laws of the particle; like diffraction and uncertainty. On death it flies with a relative high speed (may approaches speed of light) so its time interval dilates so much that we can not define it consequently we can not prosecute it.

REFERENCES

- [1] Eldieb, E (2005) place-time philosophy. Dar Elkitab Elmasry, Cairo.
- [2] Heisenberg, W. (1927), "Über den anschaulichen Inhalt der quantentheoretischen Kinematik und Mechanik", Zeitschrift für Physik 43 (3–4): 172–198.
- [3] Eldieb, e (2000), Notes of medico legal doctor, Madboli press, Cairo.
- [4] Cutner, Mark Leslie (2003). Astronomy, A Physical Perspective. Cambridge University Press. p. 128. ISBN 0-521-82196-7
- [5] Lerner, Lawrence S. (1996). Physics for Scientists and Engineers, Volume 2. Jones and Bartlett. pp. 1051–1052. ISBN 0-7637-0460-1.
- [6] Ellis, George F. R.; Williams, Ruth M. (2000). Flat and Curved Space-times (2n ed.). Oxford University Press. pp. 28–29. ISBN 0-19-850657-0.
- [7] Eldieb, E (2005), The human is a universal phenomenon, Dar Elketab Elmasry, Cairo.