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THE FUNCTIONING OF THE BODY IS NOT A SUFFICIENT CAUSE OF PAIN.

SÉBASTIEN HANRARD

Abstract.
The pain is an extremely unpleasant feeling experienced by a person when his body is injured or ill. Pain, which has a real existence as a subjective feeling, has also a cause. This is a priori the "working" of the tortured body. Yet, if this cause was only the functioning of the body, then the functioning of any tortured body would be enough to produce pain. But nobody observe that. On the contrary, each person observe that pain occurs only when one particular body is injured : his own body. As if this body had an ability to produce pain that others do not have. Which is absurd. In fact, what everyone observes is that the functioning of the body is not a sufficient cause of the pain.

Key words : hammer, body, pain, observation, insufficiency, qualia.

DEFINITIONS.

Pain : unpleasant feeling often caused by intense or damaging stimuli.
The International Association for the Study of Pain's widely used definition states : "Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."
This definition was published for the first time in 1979 by the IASP in the « Pain journal », number 6, page 250. It is derived from a definition of pain given by Harold Merskey : "An unpleasant experience that we primarily associate with tissue damage or describe in terms of tissue damage or both." Merskey, H. (1964), An Investigation of Pain in Psychological Illness, DM Thesis, Oxford.

Healthy : we consider here that a body is healthy when it is not suffering from any disease, and especially not from a disease likely to affect its ability to produce or feel pain.

1. INTRODUCTION : factual description of the conducted experiments.

The objective is to study the necessary conditions for the emergence of pain.

For this, an experimenter does the following experiences :

- Hammer blow on the right index finger of a human body n°1, healthy, awake, and placed under environmental conditions necessary for its survival and its comfort.
- Same hammer blow on the right index finger of a human body n°2, also healthy and awake, and placed under the same environmental conditions.
- Same hammer blow on the right index finger of a human body n°3, also healthy and awake, and placed under the same environmental conditions.

It is not necessary to conduct these three experiments in the same room, in the same city, in the same country or on the same continent. It is assumed that the hammer blows can be triggered remotely.
The experiments are performed with a one-second delay between them.

2. IDENTITY OF OPERATION.

We can affirm that, materially, the three experiments presented are equivalent : materially, they respect an identity of operation.
Indeed, because of their membership in the same species, all human bodies are similar. Moreover, the experiments are twins, because they are conducted according to the same experimental protocol.

So, if all the material and biological conditions are met so that **a pain 1 in the body 1** be an effect of the first experiment, then all the material and biological conditions are met so that **a pain 2 in the body 2** be an effect of the second experiment and all the material and biological conditions are met so that **a pain 3 in the body 3** be an effect of the third experiment.

Because the material and biological conditions of experiment 1 are also met in the experiment 2 and in the experiment 3.
By taking into account only the physical and biological conditions of the experiments, their effects should be :
Experiment 1 : sharp pain 1 in the body 1.
Experiment 2 : sharp pain 2 in the body 2.
Experiment 3 : sharp pain 3 in the body 3.

2. RESULTS OBSERVED BY THE PERSON N°1.

In terms of pain, the person n°1 notes the results she has observed. She writes :
Experiment 1 : sharp pain 1 in the body 1.
Experiment 2 : absolutely no pain 2 in the body 2.
Experiment 3 : absolutely no pain 3 in the body 3.

Are these results valid ?
For the person n°1, yes.

If the subject of the study was the scream and not the pain, the result of the experiment 2, for example, would not have been valid, because the person n°1 would not have been in the material conditions necessary for the observation of a production of a scream 2 by the body 2.

But there, there are no material conditions allowing to the person n°1 to check the existence of a pain 2 in the body 2. Indeed, to check the existence of a sensation, one has to feel this sensation.

Certainly, one can check, through a MRI, the activation of the brain pain area in question, but this activation, if it is potentially associated with a painful sensation, does not correspond to the definition of pain given above.

Biologists are just able to demonstrate the existence of nerve impulses and brain activity : they can't access to the sensation experienced by the person, unless they are that person.

As Daniel Dennett says in his book Consciousness Explained (1991), pain is a quale. He explains that the qualia are ineffable : we can't apprehend them otherwise than by direct experience.

Having the experience of a quale is knowing that we have the experience of a quale and knowing everything you can know about this quale. They are also private : the comparison between qualia from different people is impossible.
Thomas Nagel addresses the issue in his famous article What is it like to be a bat ?, where he explains that there is no way of knowing what it's like to be a bat : in other words, there is no way of knowing what it's like to be the other. So for pain, no way to access what he feels when he is tortured.
Thomas Nagel concludes that the qualia cannot be studied scientifically. In other words, it is **impossible to prove scientifically that a person feels pain when a body is struck**.

This private and ineffable nature of the qualia is accepted by the scientific community.

It is impossible to prove to the person 1 that pain 2 exists for the person 2. A total absence of pain in the body 2 : this is what she observes.
Therefore, we can very legitimately affirm that for the person 1, **there's been no production of pain 2 by the body 2**.

One might say that it is sufficient to connect the body 1 to the body 2 so that the person 1 feels the pain of body 2. But this is a mistake, a misunderstanding of Thomas Nagel's result : connect the body 1 to the body 2 will only allow that the nervous information coming from the body 2 stimulates the brain 1. Nothing will have changed for the person 1, who will observe a production of pain because the brain of body 1 will have received the appropriate nociceptive stimulus.
Like before, the stimulation of the « pain zone » of brain 2 will not have had the effect to produce a pain 2.

One could repeat and repeat the experiments, the person 1 will always check the same result : complete absence of pain in the bodies 2 and 3.
The reality that imposes itself to her will always be the same :
Experiment 1 : sharp pain 1 in the body 1.
Experiment 2 : absolutely no pain 2 in the body 2.
Experiment 3 : absolutely no pain 3 in the body 3.

3. CONCLUSION.

According to paragraph 2, we know that the results of the experiments in the reality that imposes itself to the person 1 are :
Experiment 1 : sharp pain 1 in the body 1.
Experiment 2 : absolutely no pain 2 in the body 2.
Experiment 3 : absolutely no pain 3 in the body 3.

Here is a schema of this reality. Pain is represented by the red color. Of course, we suppose that all the bodies of the schema are struck.

We clearly see that there is an exception in the results of the experiments. Is this exception explainable ?

In the paragraph 1, we established that by taking into account only the physical and biological conditions of the experiments, their effects should be :
Experiment 1 : sharp pain 1 in the body 1.
Experiment 2 : sharp pain 2 in the body 2.
Experiment 3 : sharp pain 3 in the body 3.

In other words, without exception.

Thus, it's clear that the reality observed by the person 1 (paragraph 2) does not correspond to the reality that should be if the physical and biological conditions of the experiments were the only conditions to be taken into account (paragraph 1).

So, we can affirm that it's impossible to explain the reality observed by the person 1 by taking into account only the physical and biological conditions of the experiments. In other words, **the physical and biological conditions of the experiments do not suffice** to explain the reality observed by the person 1.
The observed exception has not any material explanation.

Consequently, to explain the reality observed by the person 1, it is necessary to admit the existence of an other parameter that is not part of the physical and biological conditions of the experiments : if it was part of this physical and biological conditions, these ones would be of course sufficient to explain the reality that imposes itself to the person 1.

In conclusion, we can state that, since the functioning of the body is not enough to produce the pain, there is at least another kind of factor, of "force", which is not biological or material.

References.

Consciousness Explained (1991), Daniel Dennett.
What Is it Like to Be a Bat ? (1974, Philosophical Review), Thomas Nagel.