FREE WILL

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Free Will is a significant component of our self-identity. It is something we believe we have and we would be upset to be told if it was not true. But how can we justify our belief in free will?

Our experience makes us have a strong belief in the firm relationship between a cause and an effect. However, an unequivocal universal relationship between cause and effect would rule out any opportunity for free will because everything that happens would be predicated on what came before – right back to the beginning of time! There would be no freedom. This is a 'hard determinism' viewpoint.

The following approach aims to show that this is not valid and that there is way that retains cause and effect relationships but offers a way for the occurrence of free will.

While many features of the natural world show a reliable relationship between cause and effect to very high levels of accuracy this relationship is not universally applicable. There are events that do have a truly random aspect. It is postulated that it is this that provides opportunity for the existence of free will – even if it does not prove its existence.

Examples of unpredictable events include decay of radioactive atoms, damage or modification of cells by interactions with cosmic rays and, in particular, errors in the copying of DNA. If DNA always and in all circumstances copied precisely then there would be no evolution! Such unpredictable changes provided opportunities for adaptation and development of species and so opportunity for evolution.

If DNA copying is too flawed then cells would not reproduce or will not operate in an acceptable way within an organism and would be rejected. Too significant errors of memory detail, or of the input of sensory information or of the ability to make realistic assessments would impair our ability to operate and to interact with the real world. This would be revealed by the pursuit of clearly inappropriate actions – recognized by others, even if not by the individual concerned. Continuation of such a condition might cause doubt as to whether the individual was really responsible for his actions. Thus the influence of functionally acceptable random change events must be at quite a low rate of occurrence. This is evidenced by the slow rate of genetic evolution. Higher rates of occurrence of changes might be functionally more easily accepted within specific areas of the body - and maybe in parts of the brain.

Cells in the human body die and are created so there is a continuous process of renewal. On average the replacement lifespan of cells is 7-10 years. In the brain, new neurons are generated prolifically during the first 18 months after birth. After that it seems that 'neurogenesis' does occur in the adult brain, but maybe significantly only in certain areas. If some cells experience random changes in the areas of the brain concerned with memories and/or with assessment or use of memory data then this could provide the opportunity for creation of new ideas. One minor change in memory data or its assessment might lead to a cascade of reassessment of other pre-existing unchanged data. Uncertainty at the threshold levels of interactions between neurons may require quite minor levels of influence by random changes. Small random changes in memory, either caused by unpredictable random events or by slight changes in threshold levels of activation (for example due to ageing of cells), could tip the balance of the source information and/or of the process of assessment. This allows introduction of something genuinely new – something that was not in you (or anywhere else) before. This provides opportunity for

imagination and creativity and for personal and social development. The choice made in the assessment of memory and/or sensory input is still ‘our’ choice and our responsibility.

The above approach has not really changed relationships between cause and effect, because all that has changed is the introduction of minor random change to the source data and/or the basis on which this data is assessed or used. If you change the source data (by analogy, by reading a new relevant book) or you change the way you are able to think about interpreting information (also, I guess, by changing background data) then there is opportunity for a new outcome that could not have occurred previously. This seems to me to make the outcome ‘free’ from what has gone before. So in the operation of the mind it is indeed reasonable to describe that as the operation of ‘free will’. The outcome was not predefined by historical information or by personal experience. There is still a ‘you’ making the decisions so they are your responsibility and your opportunity to benefit from them. I guess that the sort of changes/adjustments that occur in the mind could well lie dormant, and be accumulated, for quite a time and so one would be unaware of these until opportunity arose for them to be activated and make a helpful contribution to one’s thought processes.

Experience shows that innovation and invention do occur – technically, scientifically and artistically. While much of this may be built (consciously or unconsciously) on prior knowledge and experience something, in fact, has been added which did not exist before. This seems a strong argument against hard determinism.

I conclude that there are events in the operation of the universe that have a random unpredictable component and this provides opportunity for the existence of free will. This does not break the expected cause-effect relationship because the random events are affecting the source data and/or the mechanism of its assessment and not the mechanisms by which data is transmitted. Having a plausible physical mechanism bypasses the inability of purely philosophical discussion to resolve the question of free will.

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