

Dear friends,

The enclosed letter is to the author of the book, "13 Things That Don't Make Sense," which attempts in part to make the case that free will is a delusion. My letter disputes both his conclusion and methodology and is perhaps more academically tight than some of my other letters. Many of you will find it interesting if not compelling. My letter in no way concerns party politics, and most readers are likely to find it agreeable, although I'd guess that those who disagree will have more interest in it. The debate as to the existence of free will has gone on for thousands of years, literally, and I would argue that recognition of it is the basis for the story of Eve, the serpent and the tree of knowledge of good and evil in Genesis. I don't believe there will be a firm resolution to the question of whether free will exists in the near future, but I do believe that the answer to the question for each of us is one of profound impact. Please enjoy and, as always, feel encouraged to get back to me with any thoughts on it.

Sincerely,
Bob Young.

September 27, 2011

Mr. Michael Brooks
Author
13 Things That Don't Make Sense
Sussex, England

Dear Mr. Brooks,

I recently finished reading your book, "13 Things That Don't Make Sense." It was both entertaining and thought provoking, particularly the earlier chapters. However, I took issue with Chapter 11, Free Will. While the chapter title is neutral as to its determination, you refer to it in the epilogue on page 206 as "our delusion of free will," and, whether based on the evidence you provide or by predisposition, your conclusion and belief is that free will is a delusion. May it please you to read my critique of your conclusion, both in terms of your examples and of the deeper philosophical argument and an exploration of the potential impact of your position should your conclusion be proven.

Forgive me for laying out your position as I write, given that this will be repetitive material to you, but in addition to helping organize my response it will give third-party readers who haven't read your book the opportunity to better understand the position being critiqued as well as my letter.

You provide two experiments as your primary evidence that free will is a delusion. The first experiment, conducted by Benjamin Libet, demonstrates that every conscious decision to take an action is preceded by measurable, unconscious brain activity up to half a second before the individual is aware of the decision to take the action. Libet was testing the "readiness potential" that manifests with the brain sending a signal prior to the decision to take any action, after his colleague, physiologist John Eccles suggested in a discussion that conscious free will must precede any voluntary act. In Libet's experiment, the individuals being tested, wired with electrodes to detect impulses, were asked to stare at a clock and flick their wrists whenever they felt like it and then report when they were first aware of the intention to make the movement. He found that, while the conscious decision to flick the wrist always preceded the movement, the brain was getting ready to take the action by an average of .35 seconds before the subject being tested was aware of the decision. Seeking to believe that free will does exist, he concluded that while the data was sound, it was his belief that there was a conscious opportunity for the individual to veto the action before taking it. Although the experiment doesn't seem to provide evidence of the veto, I included the statement in case it becomes useful in another discussion.

I would not seek to dispute the results of this experiment. It certainly seems very sound on its face, but I don't see how you can propose that these results are more than remotely relevant in supporting your conclusion that free will is a delusion. You, and physiologist John Eccles, first set up the reader with a false expectation that "free will must precede any voluntary act," and your treatment of timing suggests that you mean it must immediately precede a voluntary act. While you could dismiss my counterpoint as being too difficult to test, I would posit that most decisions of free will do not immediately precede any act at all. For myself, I find that almost every decision I make is considered well in advance of taking the action by weighing the merits of an action or possible need to take a foreseeable action in the future, including not only the consequences, both immediate and long term, but also with considerations of morality and the application of what I consider to be virtue. My strong belief, as well as my belief that it would be testable if you could create the conditions necessary to repeat the experiment, is that people generally make all of their decisions in exactly this manner, whether they are introspective enough to realize it or not. To put it another way, taking any action is complicated to the point that most of our decisions are front-loaded prior to the action taking place.

Free will is the ability to ponder, to commiserate, and ultimately to decide what we will do if a set of circumstances occurs. This isn't to say that a particular decision we make in advance of a transpiring set of circumstances will necessarily be carried out, as there are deeper, sometimes unconscious influences such as the paralyzation of fear or the interference of other decisions or previous experiences that will ultimately influence the action that is taken, but our conscious decisions made in advance will influence and usually dictate the action we take, and this is the application of free will.

Allow me to provide an example. Yesterday a friend forwarded to me a video of a traffic accident (which turned out to be a fake, thank goodness). In the video a car crashes into another car and the second car rolls down the street while shocked witnesses watch the scene. The second car sits idle for several seconds, and then the ground beneath it catches fire. Perhaps ten seconds later the car explodes, certainly killing the occupant(s). At the center of the camera view is a shocked witness who proceeds slowly toward the car before it first catches fire. When it catches fire, his friend operating the camera yells for him to get away, and he runs back a safe distance before the explosion. Not knowing that the video was a fake, it bothered me off and on for most of the day, and after wondering whether I would have gotten the occupant(s) out in time, I decided that I would try, and it would require initially running straight to the car and first pulling open the driver door without reservation. Then I found myself assessing how many seconds it would take to pull occupants of the car out and get to safety once the fire began beneath the car. I am quite certain that I've now front-loaded my reaction to that and other similar situations into my brain, through a number of conscious decisions, and if that real-time situation or a similar one were to occur, my reaction would be different than had I not seen the video. Another person who watched the video might reach a different conclusion, and a third person might have reacted a certain way without seeing the video and would react the same after watching it. Taking the time to seriously consider the actions one would take in a given situation, well in advance of the need to act, can influence the action that is taken in such a way as to produce a different result. I therefore posit that the conscious and intentional application of rational thought that influences our actions, free will, is exercised well in advance of taking an action.

The obvious point is to say that proving that the brain unconsciously prepares for an action before actually being aware of the decision to take the action is not determinative of the existence of free will. With the simplest of actions preparing the brain to operate the body takes time. An infant has to observe, experiment and practice repeatedly before developing the neural complexity to grasp a spoon, and even then the decision and the action both have to be refined over time as the action becomes less clumsy and more elegant to the point that the decision becomes entirely unconscious. My guess is that if you put electrodes on the skull of a toddler eating strained peas, you would find that the decision to take each bite is preceded by electrical

impulses from the brain. Even the decision itself becomes preprogrammed. If the child instead decides to fight the parent and refuse to eat the peas, the child is exercising free will. It may be only seconds before the decision to take the next bite, and it may be after the meal or prior to the next, when the child is trying to apply a child's understanding to the decision to accept or defy, the actions that the defiance might include and the possible reactions of the parents to the child's choice of action, but you will still get the readiness-potential brain signal prior to being aware of the decision to take the next bite or put down the spoon. The verifiable existence of the brain signal in no way proves that free will does not exist.

You go on to other examples in this vein, like saying that a person's decision to get out of bed is made without the person's awareness, or that you can show "that we are unable to explain why we buy one pair of socks over another." You write, "you routinely operate without conscious control." As above, I am not seeking to refute these observations but simply to explain why they are not determinative of whether human beings can exercise free will. The first is an example of a self-conditioned response. The decision to get up in the morning is made well prior to the alarm clock going off. As with most of our decisions, the circumstances are largely foreseeable. I supervise employees that are required to engage in somewhat routine tasks on a regular basis but have the opportunity to engage in thoughtful decision making in other aspects of their work. For some, the routine actions seem like a terrible chore, like a child's impression of not wanting to practice piano or do homework but still doing it. For others they are simply a part of the job that has to be done. If they can accept that the routine things simply must be done, a decision offree will that requires forethought, the routine things pass quickly and, to a degree, unconsciously. For others, the routine actions are a chore, because they are constantly deciding whether to take the next step, and the routine becomes quite onerous. But it in no way determines that free will does or does not exist in either case. It simply suggests that some people make decisions, perhaps to their own misfortune in some cases, at every step of the way, while others are able to simply decide in advance of a task, such as getting up in the morning, what their action will be and then to simply do what they've programmed themselves to do in advance. When a new circumstance arises, such as they wake up aching with the flu, or they simply didn't sleep well and are more tired than they expected, then it may trigger a new level of conscious decision making. Although I would argue that most people have already foreseen this possibility and have preset this decision as well, depending on their level of discomfort at the time. Professional athletes routinely engage in their sports while suffering from the flu and other ailments, and for many of them their exercise of free will was to decide that they would play through the pain well in advance of the ailment.

I would go as far as to say that a soldier, for instance a sniper with a long-ranged rifle, makes the decision as to what circumstances he or she will take lives well in advance of taking the battlefield. It isn't, "should I kill this person or not, well, let's weigh the positives and negatives," every time a potential target is acquired. Most people would have a difficult time functioning if they applied that level of decision making every time an action was to be taken. While the decision facing the soldier is one of a most serious nature, in my example it could also be routine for the soldier. A soldier in the heat of a battle has perhaps decided in advance to kill an enemy on the battlefield under any circumstance. Another soldier given the same set of inputs may have decided in advance not to kill a medic administering aid. But then here comes an enemy soldier, and my front-loaded decision to kill that person is activated before I even decide to aim, but then I see it's my brother, who has joined the enemy. Maybe I've decided in advance that I can't shoot my brother, or maybe a shocking onset of conscious decision making begins. I mentioned earlier in this letter self-conditioned responses, and someone might note that a person can also be conditioned by others to take a particular action, which I will address in more detail later in this letter, but acknowledging that a person has free will does not imply that it can not be taken or even given away, although deciding to surrender one's free will to another can itself be a conscious act of free will.

As to the "which pair of socks to buy" example, some decisions are so routine that we front load whole groups of them in advance. The human mind is certainly limited in capacity, and one of

those limitations is the time required to exercise free will and make a decision, so the time allotted for certain decisions has to be prioritized. Thus, while most people can't say why they chose one pair of socks over another, a business professional is rarely going to find that they've inexplicably chosen a pair of purple socks with pink stripes over a pair that is basic black. But there are likely individuals, though comparatively few in number, who can tell you why they chose every article of clothing in their wardrobes. I mention these examples only because your book presents them as evidence that free will is a delusion, going back to your faulty assumption that if free will exists, every action must be immediately preceded by a conscious act of free will.

The second experiment central to your argument was conducted by Yale neurosurgeon Itzhak Fried while operating on patients suffering from severe epilepsy. The experiment gave Mr. Fried and his team the opportunity to stimulate parts of the brain, and they found that stimulating specific parts of the brain with electrical impulses not only caused the person to make certain movements, such as "extending her neck and rotating her head to the right," but even caused the person to feel the urge to make the movement in question. "All this at the flick of a switch. The researchers had taken over the patients' will, and then - by giving it a bit more juice - they took over their body." You note that Patrick Haggard, the researcher who continues versions of these studies, "is enthralled by these findings." You write after having subjected yourself to his version of this experiment, "I became ever more convinced that I don't have free will." You later go on to note that in the brain, "neuroscientists are now finding the attributes we associate with the person, not the organism. Guilt, shame, regret, loss, impulsivity - they are all measurable entities."

You conclude that human beings are brain-controlled machines. So we are, but that in no way invalidates the notion that we have free will, the ability to make conscious decisions, to reason, to morally evaluate, and to act on those decisions. As I wrote above, the fact that a person's free will can be taken from them in no way determines that it does not exist. Certainly we are brain machines. Our memories, our emotional triggers, our thoughts patterns to a degree are stored there. Without the brain they would not exist and we would not exist, free will or no. The hands move by neural impulses that come from specific parts of the brain. The neural net, maintained by a constant electrical charge, connects the motor functions to the cerebral cortex, which is in turn wired to the rest of the brain; the emotion centers that influence both physical and mental activity, the hippocampus that allows long-term memories to be stored, areas where those memories are contained, some triggering others. You can stick a charged wire into the right spot and cause a person to feel rage, shame or joy, to move his or her arm. How is it that this is novel or extraordinary to you? Like your previous example, you seem to be presupposing a condition that if free will exists, it must be in an untouchable place that exists beyond the physical brain. Given that you know such a place does not exist, that all thoughts and decisions in fact come from the brain and that all memories influencing those thoughts are stored therein, you've taken a simple route to demonstrating your preset condition has not been met thus "proving" that free will is a delusion.

You do give a nod to the moral implications of your conclusions. You quote legal philosopher David Hodgson who notes, "If we find people are hard-wired to behave criminally, how long before it's cited as a legal defense." I think the more important consideration here is how long before this defense is used as a justification to pre-emptively re-wire a person's brain to reduce or even eliminate the potential of behavior that others might find to be undesirable. This example is not far-fetched when you consider what can and what has already been done when a profit motive is involved. For example it has thus far been ruled legal in the United States for a company to tell employees that they can't consume tobacco products. While among their justifications given is the right to encourage a healthy lifestyle among their employees, their real motive is to maximize their profits. The companies have financial incentives to provide health insurance, and it costs less to insure a person who doesn't use tobacco. So the company pays less to insure employees, and ultimately makes a higher profit. If the employee refuses to acquiesce, the job is taken away. Given that the employee may need the job in a world where employment can be hard to come by, the employee is further forced to limit his or her choices to

those required by the company. The willingness of some to take away choices of others has been demonstrated, and if you can convince enough people that free will is a delusion it becomes even easier to justify making other people's personal decisions for them. And we change people's perceptions generally by making small, trickle-down changes to our common and legal parlance. In the United States if you tell your doctor you smoke as little as a cigarette per week, the top of your medical chart now reads, "tobacco addiction disorder." It's still legal to do it, at this point, but the decision to do it is termed a psychological disorder.

You don't need to stick wires into people's brains to control their behavior right now. Drug companies are continually developing and improving drugs to alter the addiction center of a person's brain, and they have a profit motive to keep making those drugs more effective. The drugs already exist, and it profits the drug company if the use of the drug is encouraged or even required by law in certain circumstances. We can cure a person of addiction to tobacco, alcohol, pornography, and who knows what other psychological disorders might be out there with a simple pill that's easy and inexpensive to manufacture. The result is a happier, healthier, more obedient work force. And as Patrick Haggard has demonstrated, we can take it a step further by putting linked electrodes into the brains of society's ne'er-do-wells. You feel angry and an electrode in your pleasure center overrides the emotion. I'm sure Hubbard is enthralled with the idea. In addition to a profit motive for those producing the drug is the base motivation that some people are simply excited to control others for those others' own good.

And obedience and addiction have a strong negative correlation. It is documented that people of certain professions have higher levels of addiction than others. Lawyers, for instance, strongly trend toward the higher end of the addiction continuum, and, much as they tend to be unpopular with people in common perception (at least in this country), they have also tended to be among those pushing most actively for social reforms; John Adams, Thomas Jefferson, Abraham Lincoln, Teddy Roosevelt, Lenin? Whether you agree with them or not, lawyers and that general personality type are well represented among those who challenge the system, often in support of the under-represented and disenfranchised. While the examples speak more to the profession of law than to the addictive personality type, the two are strongly related. But we can reduce the influence of society's malcontents with a pill that could be produced with little expense and great profitability if we can convince enough people that civilized society as a whole will operate more expediently with its application. Certainly in the proper civilized setting the murder rate would decrease if addiction could be significantly curtailed. And in a legal setting, the primary defense against this is that people should have the right to decide for themselves how to live their lives; that people have free will. But you and Mr. Haggard provide the perfect counter-argument against this notion if you can "prove" to the general public that free will is a delusion. "They never made their own choices, they only believed that they did. You can't take something from someone that he never had in the first place." You settle the philosophical argument in favor of determinism, that everything that ever happened was directly caused by the things that happened before it. There was no decision making at any point in time, no rational thought, but merely the illusion of it. This is just one more example of the potential harm to be caused should your argument be accepted, and it leads me to believe your conclusion is morally and academically irresponsible given the evidence you provide in support of your position.

Note also that this example of controlling criminal behavior and deviant personalities was made because it's something that is already in the works, but it is only one example of the potential negative social impact should your argument that free will is a delusion be accepted. What would be the impact on societal self-perception in more general terms? Many are motivated by the idea that their choices matter; that they can to a degree have an influence over their own future. Many would never accept your conclusion, but for many others it would be a relief to have people in positions of influence and authority telling them that they ultimately are not responsible for their decisions; that their lives are purely a product of circumstance. Most of us don't have a serious moral dilemma when it comes to slaughtering cattle, fowl or fish for food. I think it accurate to say most people believe robots and computers are not entitled to being treated with the same dignity that we require for human beings. Convincing people

that free will is a delusion would have the impact of convincing them that people are really no different than robots or cattle. Again I use the word expedient, but what is expedient for the majority, and for those controlling that majority, would be further elevated in perceived importance, and the dignity afforded to a human being, to a person, would be further marginalized. With your Hubbard example, if we learn that a person is hard wired to behave criminally, without free will it is simply a defective being, a defective machine. And what do you do with a defective machine? You don't try to reason with it or empathize with it. You fix it, or you get rid of it, but in keeping with this example you wouldn't simply get rid of it but instead recycle it into something useful for others, into products. There are already too many existing examples of human beings treating other human beings like garbage to be disposed of to list here. Do you think convincing a greater number that people are really just machines lacking free will is going to have a positive or negative impact on this trend? It's a particularly frightening concept for those of us who believe in free will and human dignity considering how often what is perceived to be criminal or deviant changes over time. If we who believe in free will are in a small enough minority, and demand that human beings have the natural rights associated with that belief, then that could eventually be perceived as deviant or even criminal.

I do think it's clever how you turn the table regarding the burden of proof. If you want to prove something does not exist that is commonly accepted as existing, the burden of proof is on you. If I choose chocolate ice cream rather than strawberry on a particular day, it's prima facie evidence that free will exists. A person is confronted with a decision, and that person decides a course of action that has an outcome and consequences. It was within that person's power to make a different decision which would have yielded a different outcome and different consequences. The person exercised free will. Free will exists. While you have not met the burden of proof in demonstrating that it does not, your argument turns the tables and suggests that those who believe in free will have to make the case for its existence. Because it lacks a physical presence you can impose a question like, "how can you prove that the choices you make were actually made by you and not simply put into your conscious mind by your physical brain," or, "how do you know that your decision wasn't simply the culmination of everything that led up to your making it, and therefore your decision was predetermined and ultimately inevitable." You set yourself up in a position to then say that whatever answer is given doesn't meet your predetermined standard of existence. In any event your primary examples, the physiological experiments, only speak to the first question, and you've failed to meet your burden of proof on this one. The second question, as you are aware, has literally been debated for thousands of years, and without evidence to the contrary, most people continue to believe that free will exists. Because free will is perceived and the consequences of the perception, i.e. the decisions themselves, can be proven, the burden is on you to prove that it does not. To turn the tables and make people believe the burden of proof is to disprove your conclusion on a subject with deep philosophical meaning based on misapplied science is underhanded in my opinion.

For the sake of completeness, since you devoted two pages to it, I would comment that the Wegner/Wheatley experiment where people engage in moving the cursor around the Ouija board and then note their intentions afterward really adds nothing to the argument other than to demonstrate that a failing of human character is the desire to justify why they did or didn't take a particular action. It would not seem to touch on questions of free will at all but for your other contentions made earlier in the chapter. The participants in the experiment claimed they chose to move the cursor onto particular icons when in fact the experiment insider determined where the cursor stopped. The subjects had reason to believe they had some control over the movement of the cursor because they were exerting pressure on it. It really adds nothing to the discussion but to confirm that people can be simple minded and self deceiving. Granted, part of your argument is that free will is a self deception, but proving that people aren't honest with themselves and that free will is a delusion are really two very different arguments.

The examples you provide aptly demonstrate some interesting realities concerning how the brain works and how the decisions immediately preceding an action are predetermined by the brain. It does not, however, demonstrate that free will is a delusion, as you firmly conclude. This is not a scientific anomaly like dark matter, at least to the extent that it's been explored so far. I opened this letter by saying that I enjoyed your book. That is true. But as it progressed, and in Chapter 11 in particular, it seemed as though you were working toward a philosophical agenda regarding perception in general. You write early in the chapter, "philosopher Immanuel Kant put the problem of free will on a par with God and immortality. These, he said, were the only three things beyond the power of the human intellect." Forgive me if I am mistaken here, but it seems to me that you've put yourself firmly on the side that you believe to have one-upped Kant, and notions of God and immortality. In the earlier chapters you simply write on scientific findings, but in the case of free will you actually involve yourself in the experiments. You write, "I became ever more convinced that I don't have free will." Your book is about scientific anomalies, and you put your "delusion of free will," and its philosophical implications, alongside dark matter and dark energy as though the "delusion" is a similar scientific anomaly. A person could almost conclude that you wrote the whole book in an attempt to make this case.

If you read this critique closely enough, you will likely perceive that I have my own preconceived notions on the subject of free will, and these extend to God and immortality. Rather than get into that in this letter, I've enclosed my own letter Truths of God, and a separate letter, Understanding the New Testament, for your review. A full copy can be downloaded at www.TruthsofGod.net. When you get past the early chapters that focus on simple concepts such as the purpose and necessity of law, as well as a short Biblical re-examination, you'll see some of my arguments in support of the belief in free will, which must come before spiritual matters derived by faith can be fully appreciated. Please note that Truths of God was not written for academics but rather to try to encourage a consensus of basic understanding that could be appreciated by anyone interested in it, so the earlier chapters will probably not seem to offer anything new to your perspective. You note that, "we have built our civilizations, religions and societies on the concept that people ought to be responsible for their actions." That statement is not as accurate as you seem to believe it to be, as Truths of God explains, but my hope is that it becomes more true in our future. I would enjoy the opportunity for further discussion on these subjects.

Sincerely,
Bob Young.