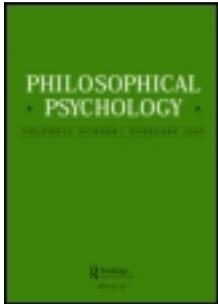


This article was downloaded by: [University of Haifa Library]

On: 06 December 2012, At: 06:26

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Philosophical Psychology

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/cphp20>

Neurology, psychology, and the meaning of life: On Thagard's The Brain and the Meaning of Life

Iddo Landau

Version of record first published: 05 Apr 2012.

To cite this article: Iddo Landau (2012): Neurology, psychology, and the meaning of life: On Thagard's The Brain and the Meaning of Life , Philosophical Psychology, DOI:10.1080/09515089.2012.677531

To link to this article: <http://dx.doi.org/10.1080/09515089.2012.677531>



PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

REVIEW ESSAY

Neurology, psychology, and the meaning of life: On Thagard's *The Brain and the Meaning of Life*

Iddo Landau

The Brain and the Meaning of Life

Paul Thagard

Princeton: Princeton University Press, 2010

274 pages, ISBN: 9780691142722 (hbk): \$29.95

This paper criticizes central arguments in Paul Thagard's The Brain and the Meaning of Life, concluding, contrary to Thagard, that there is very little that we can learn from brain research about the meaning of life. The paper offers a critical review of Thagard's argument against nihilism and his argument that it is love, work, and play, rather than other activities, that make life meaningful. Moreover, the paper argues that the rich neurological information Thagard presents throughout the book does not contribute at all to his arguments and, more generally, that neurological research is irrelevant also to almost all other aspects of meaning of life research.

Keywords: Brain; Evidence; Meaning of Life; Neurology; Nihilism; Values

1. Introduction

Neuroscience and value theory are interrelated in a number of ways. First, neuroscience could describe what occurs in the brain when we make value judgments. Neuroscience can teach us, for example, that when we make aesthetic judgments some areas in the brain are activated, while when we pass moral judgments other areas are activated. Second, ethical judgments can be used to evaluate the moral legitimacy of different aspects of brain research. For example, some types of brain research may be claimed to be morally impermissible because they harm the subjects involved.

Iddo Landau is an Associate Professor of Philosophy at Haifa University

Correspondence to: Iddo Landau, Department of Philosophy, Haifa University, Haifa 31905, Israel.

Email: ilandau@research.haifa.ac.il

Similarly, as is sometimes argued about certain aspects of genetic research, it might be claimed that some topics in brain research should be morally prohibited because their results could be used in the future in ethically wrong ways. Third, ethical questions can arise about the way we should use the neurological knowledge we already have. For example, which types of neurological treatments of the insane are morally legitimate and which are not? If neuroscientific findings can be applied in ways that invade privacy, when (if ever) should we be allowed to use them?

Paul Thagard's *The Brain and the Meaning of Life* is exceptional in the context of neuroscience and value theory in at least two central ways. First, while most of the discussions on neuroscience and value theory relate to ethics and a few to aesthetics, Thagard relates neuroscience to the meaning of life.¹ Second, most authors writing on neuroscience and value theory are quite cautious in the conclusions they draw from neurology to value theory. Thagard's arguments, however, are much bolder.

Thagard's main endeavor is to show, on the basis of work done in brain science and psychology, that love, work, and play make life meaningful. This claim can be understood in two ways. The first is that love, work, and play indeed *make* life meaningful; that is, that nihilism is wrong. The second is that it is *love, work, and play* (rather than, say, religious faith or accumulating money) that make life meaningful. Thagard argues for both these theses. He characterizes his approach to the question of the meaning of life as "neural naturalism" (pp. xii & 11–12), and refuses to rely on a priori truths (pp. 5 & 35–40), intuitions (pp. 107–108 & 137), religion (pp. 13–19 & 32–35) or virtue ethics (p. 248). He emphasizes that "brain science matters for the most fundamental philosophical issues about...the meaning of life" (p. xii), and that "neuropsychology is richly relevant...to the question of the meaning of life" (p. 3).

The argument for the claim that love, work, and play can make life meaningful is presented early on, and is then repeated many times throughout the book:

Love, work and play deserve to be meaningful because they contribute to vital human needs for relatedness, competence and autonomy. Love, work and play satisfy requirements that people need to live as human beings, and so provide the meaning of life normatively as well as descriptively. (p. 10; see also pp. 168 & 212)

Likewise: "love, work, and play are understandable and justifiable as crucial for satisfying vital psychological needs arising from the nature of our brains. That is why they are central parts of the meaning of life, normatively as well as descriptively" (p. 174).

Thagard argues that neurological and psychological evidence shows that in order to be or function as human beings, we need relatedness, competence, and autonomy. Without these three dimensions we may perhaps survive on some level, or continue to be members of the biological species *homo sapiens*, but our lives would be so poor that, at least under some understandings of what it means to be a human, we could not be said to be human at all. Thus, relatedness, competence, and autonomy are necessary conditions for being human. Love, work, and play contribute to enjoying relatedness, competence, and autonomy in one's life, and thus contribute to one's

ability to be human. Hence, love, work, and play should be seen as making life meaningful, not only descriptively but also normatively, not only subjectively but also objectively.

Thagard does not attempt to define “love,” “work,” or “play.” But his discussion implies that in referring to “love” he means not only romantic love but actual positive interactions in general (pp. 152–153); “work” for him is any deliberate activity for remuneration (pp. 158–161);² and “play” is any activity for enjoyment and recreation, including, therefore, not only tennis but also coin-collecting, reading, and mountain-climbing (p. 161). He is more explicit regarding the other three central terms he employs. “Competence” for him is effectiveness in activities “by engaging in challenges and experiencing mastery in the physical and social worlds”; “autonomy” is the feeling that “activities are self-chosen and self-endorsed”; and “relatedness” is “a sense of closeness with others through attachments and feelings of security, belongingness and intimacy” (p. 170). In this paper, I will not dispute Thagard’s particular usage of these terms. I will grant here, following Thagard, that love, work, and play do indeed contribute to relatedness, competence, and autonomy. Even if they do not, their descriptions could surely be amended so that some versions of the former would contribute to some versions of the latter. I would like to focus, instead, on more central issues in Thagard’s argument. In what follows, I will criticize Thagard’s arguments for the wrongfulness of nihilism (section 2), and for the claim that that love, work, and play, rather than other activities, make life meaningful (section 3). Moreover, I will argue that his contention that neurology is richly relevant to meaning of life research is incorrect: neurological research is mostly irrelevant to most aspects of meaning of life research (section 4).³

2. The Argument Against Nihilism

One of Thagard’s main aims in this book is to disprove nihilism by showing that life is meaningful and worth living.⁴ I suggest, however, that his argument does not disprove nihilism. The argument presents the notion of “being human.” Then, relying on psychological and neurological data, it claims that relatedness, competence, and autonomy are necessary for being human, and that love, work, and play contribute to relatedness, competence, and autonomy. But all of this does not prove that life is worth living unless we also assume that being human is itself of sufficient value to make life worth living. This assumption, however, is precisely the one many nihilists do not accept. Of course, if it is accepted that being human is valuable, the rest of Thagard’s claims about relatedness, competence, and autonomy, and about love, work, and play, may follow. However, since nihilists do not accept the value of “being human” in the first place, they need not accept the claim that love, work, and play, or anything else, make life meaningful. They may agree that love, etc., contribute to relatedness, etc., and that relatedness, etc., are necessary for being human, as well as accept each and every one of Thagard’s other psychological and

neurological claims about what makes people happy or active. But none of this need convince them that life is meaningful.

It might be replied that every argument must start out from some basic assumptions, and that if these are not contentious and are shared by most discussants, there is nothing wrong with relying on them. However, in the context of the present discussion, the assumption that life is worth living *is* contentious and is rejected by an important segment of the discussants: the debate between nihilists and non-nihilists is one of the main controversies in the field. Thagard himself seems aware of this when he sets out to *show* that nihilists are wrong: he begins his discussion in a section called “Why live?” by raising Camus’s question whether there is any reason not to commit suicide (pp. 1–2). Likewise, there is an entire chapter of the book, chapter 7, called “Why life is worth living,” and one section of that chapter is dedicated to nihilism (pp. 143–146). Within value theory there are many discussions in which we could conveniently assume that life (or being human) is worth living, but this is not one of them. Thagard’s argument, claiming that love, work, and play contribute to relatedness, competence, and autonomy, which in turn are vital for being human, implicitly assumes, rather than proves, that nihilism is wrong.

In some other places in the book, however, Thagard presents a second argument against nihilism. This argument appears to rely on the fact that most people are happy or are not nihilists. Thus, he says that “counting against nihilism is the empirical finding that most people are happy” (p. 145). Thagard might be assuming that nihilist arguments are based on the supposition that life includes more suffering than happiness. But many arguments for nihilism do not rest on this supposition. For example, Benatar (2006, chapter 2), whom Thagard cites (p. 245), has argued that coming into existence is *always* a harm. Such is the case even with a life that encompasses more pleasure and benefit than suffering and harm, since, according to Benatar, there is an asymmetry between pain and pleasure. The presence of pain is bad, and the absence of pain is good; but the presence of pleasure is good, whereas the absence of pleasure is *not* bad. It follows from this asymmetry that not coming into existence is good, because it avoids the suffering that would have been experienced in that life, without being bad because it avoids the pleasure that would have been experienced in that life (Benatar, 2006, pp. 38–41). Sartre’s nihilism, as well, does not rely on premises concerning the ratio between happiness and suffering. Sartre argues, rather, that “it amounts to the same thing whether one gets drunk alone or is a leader of nations” and that “all human activities are equivalent” (1956, p. 627), because we can never justify our choices of our basic values; they are all arbitrary. Likewise, McDermott does not presuppose that life is more painful than pleasing when he writes, “if I do not know the ultimate meaning of when, of how, of why, and I am deeply skeptical of the integrity of those efforts to explicate those questions... then again our question comes to the fore, why bother?” (1991, pp. 679–680). Thagard concedes that “of course, the fact that most people are happy does not in itself refute nihilists” (p. 145). But if this is so, it is unclear why he initially writes that the high number of happy people counts against nihilism, or why he later adds, in the conclusion of the chapter titled “Why life is worth living,” that

“observations of the pursuits and happiness of most people provide good reason to reject nihilism, the view that life is meaningless or absurd” (p. 166). Thagard’s argument about nihilism vis-à-vis the statistical prevalence of happiness, then, is confusing.

3. The Argument that Love, Work, and Play Make Life Meaningful

As pointed out above, Thagard relies on neurological and psychological research to argue that love, work, and play are meaningful because they contribute to relatedness, competence, and autonomy, which are in turn necessary conditions for being human. The notion of “being human” does a lot of work in Thagard’s theory; a great deal in his argument depends on it. Thagard does not elaborate much on what being human consists of. He does refer to it as “a life of value,” “a good human life” (p. 169), “human thriving” (p. 171), and as the ability “to function as human beings” (p. 174). But this, of course, does not say much about the content of “being human.” It is clear, however, that he does not take being human to be merely the state of existing or staying alive as a member of the biological species *homo sapiens*. Being human, for Thagard, is being human in *a certain way*. It is human existence in which certain thresholds of relatedness, competence, and autonomy have been passed, and is not only a descriptive but also a normative notion.

This means that Thagard has a specific notion of “the good life.” This is another notion that Thagard does not prove, but simply assumes. However, not all people’s views of the good life are similar to Thagard’s, and not all will accept his views of the normative human situation that should be seen as worthy and meaningful. Many would consider a human rights activist in the former USSR who is in solitary confinement, thus lacking both relatedness to others, the ability to exercise her competence, and autonomy, to still possibly have a meaningful life if she succeeds in retaining some ideals. Of course, the confined activist might retain some knowledge and skills, but Thagard understands competence as “engaging in challenges and experiencing mastery in the physical and social worlds” (p. 170), which may well not be true of the inmate. Likewise, the activist might still think about those outside, but Thagard seems to understand relatedness as having to do with actual interactive contact. Some may also hold that although one cannot be said to be human without relatedness to other people, competence, on the other hand, is not necessary (think “let it be” or “que sera sera”).

Others might hold a version of what might be called the “ideal of the great warrior” who, although highly competent, is not autonomous (he or she is bound by loyalty to the rules of the sect or order to which she or he belongs) and need not be related to other people (he or she may be a lone warrior, or the last of the tribe). A third ideal might be that of the ascetic, who might not be competent in Thagard’s sense of the term (the ascetic might show mastery over herself, but not over the physical and social environment), might not show much relatedness at all and, perhaps, have no autonomy. A possible counter-argument is that even if the ascetic’s

life is meaningful, it would have been more meaningful had it met Thagard's three conditions. But even had this been the case, the example suggests that Thagard's conditions could not be considered necessary conditions for meaningfulness, as he presents them. Moreover, for an ascetic engaged in focused reflection, looking inwardly, or prayer, relations with others may well be distracting and diminish meaningfulness. Thus, the specific normative content Thagard inserts into "being human" is neither obvious nor accepted by all. As with the argument against nihilism, it is assumed rather than proven. The argument from "vital needs," then, already assumes the norms it aims to prove.

True, Thagard does add neurological and psychological data to his argument. For example, he writes that there is psychological evidence that relatedness, competence, and autonomy are "associated with well-being, while social context and individual differences that forestall them are associated with poorer motivation and performance"; moreover, "the formation of social bonds is generally associated with positive emotions.... In contrast, threats to social attachments...are primary sources of negative emotions" (p. 170). However, arguing from positive emotions to meaningfulness is problematic. As Thagard himself accepts, one cannot argue from happiness to meaningfulness (pp. 148–149); he presents an example of a drug addict who is happy but whose life is meaningless, even if the drugs did not have unpleasant long-term effects on him (p. 149). As Thagard himself notes elsewhere in the book (p. 201), what the majority of people do, enjoy, or see as worthy may not be objectively or normatively worthy.⁵ But if this is the case, it is unclear how his argument from psychological and neurological evidence could work.

Thagard's argument from empirical evidence is also problematic because it deduces values from facts. Of course, not all philosophical systems accept this distinction; some systems present some "oughts" as part of the "is." Aristotle (1960, p. 123), for example, takes our end, or formal cause, to have both ontological and evaluative dimensions. In some religious thought it is presented as a fact that God decrees some values. Kant (1788/1998, pp. 92–93) says that we have in us an inherent respect for the moral law, and Buber (1937, pp. 32–33) presents as a fact about our mental makeup that there is a dimension in us, the I-thou, that yearns to empathize with the other. Levinas (1969, pp. 197–198), too, takes moral demands to stem from an encounter with what he calls the other's "face." Thagard, however, associates himself with the tradition that sharply separates fact from value. He makes a point of distinguishing his empirical discussion from his normative one, writing that whereas in chapter 7 he discusses love, work, and play descriptively, chapter 8 shows that "love, work and play are normatively appropriate goals because of their contributions to vital human needs" (p. 167). Likewise, he writes that:

To provide a solid answer to the question of why life is worth living, we need to establish that some goals really are valuable, not just that many people value them. Hence the question of the meaning of life needs to move from the descriptive realms of psychology, neuroscience, and sociology into the normative realm of philosophy. (p. 168)

He also asserts that Hume was right about the impossibility of deriving value from fact (p. 183). But if this is so, it is unclear how his argument could work.

Perhaps Thagard should be understood, however, as only trying to argue from the *coherence* of some normative goals with empirical evidence; he is only trying to show that empirical evidence about love, work, and play, and about relatedness, competence, and autonomy, cohere with the normative content of “being human.” But that would not help either. Suppose we had sufficient empirical evidence to show that most people were bad most of the time. This evidence would cohere not with the goal of making people good but, rather, with the goal of making people bad. Yet this would be insufficient for showing that evil behavior is meaningful. The same would be true if we found empirically that most people were lazy or valued the lives of the celebrities about whom they read in TV guides. Showing that empirical evidence coheres well with some ideals is insufficient for claiming that those ideals are meaningful. An *ought* cannot be derived from an *is* by arguments from coherence anymore than by deductive arguments.

Another difficulty has to do with Thagard’s presentation of love, work, and play themselves as the meaning of life (e.g., he mentions the “conclusion that the meaning of life is love, work, and play,” p. 174). However, in Thagard’s system love, work, and play are *means* to relatedness, competence, and autonomy, which themselves are necessary conditions for being human. The worth of love, work, and play is dependent on the worth of relatedness, competence, and autonomy, which are presented as worthy because without them one cannot be human. Thus, it seems that what Thagard sees as having the highest and unconditional worth, from which the worth of other notions is derived, is being human. But if this is so, it is unclear why Thagard does not present being human as meaningful, and all the rest as merely means or conditions for it.

It could be replied, perhaps, that Thagard should be read as taking relatedness, competence, and autonomy to be not merely necessary conditions for but also dimensions or constituents of being human (see, e.g., pp. 174–175). Thus, relatedness, competence, and autonomy would not have only dependent worth; as they are also a part of being human, the meaningfulness of the latter is also their own worth. But even if we accept this equation, love, work, and play, which are presented as contributing to relatedness, competence, and autonomy, can still only be said to have a derived and dependent value.

Thagard himself is aware of this problem. He writes:

By now, you may be wondering why I don’t just say that competence, relatedness and autonomy are the meaning of life, if these needs explain why people pursue love, work and play. The reason is that there is much more direct experimental evidence, presented in chapter 7, for love, work and play as really mattering to people than for the three abstract needs [of relatedness, competence and autonomy]. (p. 174)

But this reply is problematic since, if Thagard is willing to argue from what is shown empirically to matter to people to what is objectively meaningful, it is unclear why he

needs at all the notions of “relatedness,” “competence,” “autonomy,” and “being human.” As already pointed out above, Thagard himself has difficulties with the notion that what neurological and psychological research shows to matter to people is what *really* matters, i.e., is objectively and normatively the meaning of life.

4. Brain Research and the Meaning of Life

A central claim in Thagard’s book is that brain research is highly relevant for discussions of the meaning of life. I will argue here, however, that the rich neurological information that Thagard presents throughout his book does not contribute at all to his arguments. Moreover, I will argue that brain research is also irrelevant for almost all other issues pertaining to the meaning of life. My point, however, is not to repeat the claims made above about empirical facts and the meaning of life, simply rephrasing them here in terms of *neurological* facts. I am not just claiming that one cannot derive value from fact in the neurological sphere either, so that neurology cannot assist Thagard in establishing that the norms he specifies are objectively meaningful. While this claim is certainly true and needs stating, the point I will make here is more radical: brain research would not do any argumentative work for Thagard even if it *were* possible to derive an ought from an is, or even if Thagard were only trying to present claims about the *subjective* feeling of meaningfulness. This is because neurological facts, in themselves, are highly uninformative. To a certain point, my criticism follows the views of the New Mechanists, such as Bechtel and Craver. Bechtel (2008, pp. 129–158) argues that neuroscientific explanations require multilevel perspectives; explanations should not only decompose phenomena to their mechanistic components but also recompose those components and show how they generate the phenomena in question, as well as contextualize the mechanisms in their environment. Thus, Bechtel’s account is non-reductivist: he acknowledges levels other than the various neurological-mechanistic ones and takes them to be relatively autonomous from one another. Craver (2007, pp. 9–19 & 196–227) compares full explanations to mosaics, and argues that neuroscientific explanations must operate simultaneously on a number of levels and even in a number of fields, from molecular activity to organism behavior. My criticism of Thagard’s discussion also rejects strong reductionism of all phenomena to neurological facts, but it diverges from discussions such as Bechtel’s or Craver’s by suggesting that, for most issues in meaning of life research, neurological facts are unhelpful and irrelevant, even given multilevel perspectives. The psychological and philosophical levels are quite sufficient for discussing most issues in meaning of life research, and the neurological level contributes very little. There is very little that we can learn from neurological facts about the meaning of life.

Thagard employs three levels of discussion. The philosophical-normative level includes claims about the objective value and meaningfulness of various aspects of our lives, such as the claim that love, work, and play are central elements of what he

sees as being human. The psychological level relates to claims about what people feel, based on statistical analysis of their self-reporting on their feelings and emotions. Thagard mentions, for example, studies that show that widowhood and divorce strongly diminish life satisfaction (p. 147), that sensing well-being requires positive relationships and social belonging (p. 152), and that lack of employment generates a significant decrease in happiness (p. 147). The third, neurological level of discussion includes claims about material processes in the brain, relating to activation or deactivation of various centers in the brain or changes in the levels of certain chemicals. For example, when we read about love (pp. 152–158), we learn that brain scans of people who are in love show increased activity in regions that have to do with dopamine, especially the ventral tegmental area and the nucleus accumbens (p. 153). We also learn that these are the same brain areas that are activated by exhilaration-producing drugs such as cocaine. Cortical areas, such as the amygdale and anterior cingulate, were also activated in these experiments (p. 153). Another study shows the effect of the brain chemical oxytocin: administering oxytocin to participants in a financial game increased their trust in one another by 17 percent (p. 154). In addition, Thagard presents information about what occurs in our brains when we work (pp. 172–173) and play (pp. 161–165).

I have argued above that Thagard's move from claims about what makes people feel happy to claims about what is objectively meaningful—that is, from the psychological level to the philosophical-normative level—is problematic. His psychological claims should have been bolstered by a sufficiently strong philosophical-normative theory about the good life. For the sake of argument, however, assume that this does not pose a problem in Thagard's discussion, or grant that Thagard did present a sufficiently strong philosophical-normative theory that explains why relatedness, competence, autonomy, etc., are indeed parts of a normative notion of being human or the good life. It would still be unclear, however, how the neurological data Thagard presents strengthens or weakens the psychological or philosophical aspects of his theory. The contention that we need relatedness, etc., in order to be happy or be human would be just as strong if it were discovered that the nucleus accumbens is in fact deactivated rather than activated when we are in love, or that it is actually not the nucleus accumbens but rather another part of the brain that is activated, or that in fact nothing at all happens in the brain when we sense love (or anything else), but that everything transpires in the heart or spleen. The claims that we need relatedness, competence, and autonomy in order to sense happiness or be human, or that love, work and play contribute to relatedness, competence, and autonomy, would be no stronger or weaker even if we knew nothing at all about the brain. Knowing what happens in the brain when we lack relatedness is interesting, but does not in itself contribute in any way to the claim that we cannot sense, or have, a meaningful life without relatedness. The work of justifying the claim that without relatedness our life is sensed as meaningless, or is meaningless, is not performed by data about our cerebral processes.

Likewise, if someone were to have a different view of being happy or of being human, suggesting that relatedness is unnecessary for or even obstructs these ends,

data about cerebral processes would again not make any difference. If we judge that relatedness is necessary for happiness and for being human, we do so for reasons from the psychological and philosophical levels, independently of any neurological facts, and we would have called a life that lacked relatedness meaningless even if we knew nothing of what happens in the brain when we lack relatedness.

All this would be true also if Thagard held some other views, such as that it is not relatedness, competence, and autonomy that are necessary for having certain feelings, or for having objectively meaningful lives, but rather only relatedness, or only competence, or perhaps neither, and instead holding that it is in fact having a sense of mission or sensing one's social power that are necessary. Knowing what happens in our brain when we experience relatedness, social power, or a sense of mission (or lack thereof) would have not made any difference. Suppose that we identified in the brain centers that are activated when we sense that we have a mission. Without evidence about the higher psychological level, lower-level neuroscientific evidence cannot on its own tell us whether a sense of mission is necessary for having certain feelings. If we already knew the neural areas realizing certain feelings, and then learned the neural basis of a sense of mission, then perhaps we could make an inference about the relation between a sense of mission and these feelings that is pitched solely at the neuroscientific level. But to do this we would already have to have drawn connections between these psychological phenomena (feelings and a sense of mission) and the neural mechanisms that realize them. Similarly, identifying the brain centers that are activated when we sense that we have a mission would not help us show that having a sense of mission is necessary for having objectively meaningful lives; to demonstrate this, we would need a philosophical theory (explaining, for example, why a feeling of meaningfulness is necessary for objective meaningfulness) and psychological evidence (showing, for example, that a sense of mission is necessary for a feeling of meaningfulness). Brain science in itself would be irrelevant for such claims.

This is true also as regards the evaluation of certain brain processes as harmful. If we saw only the brain processes themselves—for example, the deactivation of an area A—we could not deduce from this alone that something harmful has happened to the person, and would not have said that something harmful occurs in the brain. Once we learn from that when area A is deactivated a person is, say, debilitated (he tells us that he cannot understand simple descriptions and we see that he cannot solve simple problems), we characterize this change as harmful to the person and to the brain. If we were to learn, in contrast, that when that area A is deactivated one's paranoid hallucinations disappear (she tells us that she no longer thinks that KGB and CIA agents are following her everywhere), we would have called this a benefit to that person and would say that the brain has healed. We identify processes in the brain as beneficial or harmful, then, not because of anything in the brain itself. Brain research merely shows the correlation between events in the brain and what happens in the psychological and philosophical spheres. It does not give us any information about the identity, or the value, of what we find in the psychological and philosophical spheres.

In themselves, processes in the brain are uninformative. If we only saw a given brain process—for example, deactivation of a certain area A of the brain—we could not deduce from that alone that we have here a case of an insufficient degree of, say, relatedness. We characterize processes in the brain thanks to their correlation with the psychological events. We call a certain center in the brain “the fear center” or “the love center,” for example, not because there is anything fearful or lovable in the tissues themselves, but because we have seen certain moods in people when these areas are stimulated. If we were to discover now that stimulating a certain center produced, in many people, not only love but, say, greed, we would start identifying that center differently. But while the neurological level in itself—without the psychological or philosophical levels—is uninformative, the psychological and philosophical levels are quite informative. We can understand, for example, claims about what enhances or destroys love or about the importance of love for a meaningful life even if we know nothing about cerebral or chemical processes. The relation between the different levels, then, is not symmetrical.

My discussion in the preceding paragraphs of what happens in the brain when we feel or think was schematic: I have been talking about activation or deactivation of an area A, while Thagard presents data about the specific processes occurring in the brain when our needs in relatedness, competence, and autonomy are fulfilled (or frustrated). But the further information that Thagard supplies does not at all change the picture. This, indeed, is part of the point made here: brain research is unhelpful for deciding what makes life meaningful objectively or subjectively not because we still have only a general picture, in which some details are missing, of what happens in the brain. Brain research would be just as unhelpful even if we knew more—or everything—about occurrences in the brain when we feel and think. We would still have to ask people how they feel, and *these* reports, to which brain processes would only be correlated, would be the informative ones, from which we would build theories about feeling and living meaningful lives.

Thus, I disagree with Thagard’s claims such as “support for the importance of these realms [love, work, and play] comes from psychological and sociological evidence . . . and also from emerging neurological understanding of how they operate in our brains” (p. 166). Neurological information does not support his claims in any way. Likewise, I am baffled by statements such as “finding a neural basis of the desires for competence, relatedness and autonomy is important because it shows that they are deep biological needs as well as psychological ones” (p. 174). Of course there is a neural basis to our desires, as there is to anything else we think or feel, since everything mental is also neural (unless one believes that some things happen in the mind but not in the brain). Knowing that they have neural correlates, then, does not in itself show that competence, relatedness, and autonomy are “deep biological needs” more than any other desire we may have.⁶ Again, information about the brain and its processes does not seem to make a difference to Thagard’s project.

I suggest, furthermore, that brain science is irrelevant not only to Thagard’s specific project, but also to many other issues in meaning of life research. Consider some examples of the main issues discussed in the field. One is whether we should be

subjectivists or objectivists in regard to the meaning of life. Taylor, for example, argues against subjectivism that the notion of meaningfulness presupposes objective value, so that “which issues are significant I do not determine. If I did, no issue would be significant” (1992, p. 39). If something is chosen arbitrarily, just because we feel like it, and has no objective status for us, it cannot be considered meaningful. Frankfurt, in contrast, argues for subjectivism, pointing out that, in the case of love, “devoting oneself to what one loves suffices to make one’s life meaningful, regardless of the inherent or objective character of the objects that are loved” (2002, p. 250). Likewise, Trisel argues that “since there is no pre-ordained purpose of life, or at least there is no evidence of such a purpose, the only purposes that we could be failing to achieve are ones that *we have conceived*” (2002, p. 73).

Another issue in meaning of life research relates to perfectionism. Should only those who achieved some excellence, such as Da Vinci, Mother Teresa, Shakespeare, or Kant, be considered to have had meaningful lives, or could more ordinary lives, such as yours and mine, also be considered meaningful? Some writers on the meaning of life, such as Bond (1983, pp. 159–161), seem to suppose that meaningfulness has to do with excellence. However, Baier argues that taking only lives that attain excellence to be meaningful amounts to adopting overly high standards and “is as illegitimate as if I were to refuse to call anything tall unless it is infinitely tall, or anything beautiful unless it is perfectly flawless.... We do not fail every candidate who is not an Einstein” (2008, pp. 108–109). When discussing theism and the meaning of life, Cottingham argues that without belief in God “it is hard to see how we can achieve the necessary confidence and resolution to follow the path of goodness” (2003, p. 72), which, in his view, is a prerequisite for a meaningful life. Metz (2005, p. 261), however, replies that it is incorrect to claim that God is necessary for meaningfulness, since other religious concepts, such as the Karma law, can also induce people to behave morally.

Williams (1973, pp. 89–100) posits that death does not make life meaningless: on the contrary, without death, life would be meaningless, since it would necessarily become boring. Fischer (1994, pp. 260–261), however, argues that eternal life need not be boring and meaningless since one can vary one’s activities rather than repeat them monotonously. Strawson (1982, p. 66) asserts that hard determinism undermines our understanding of interpersonal relationships in a way that renders our lives meaningless; attitudes such as moral indignation, moral resentment, forgiveness, gratitude, and love become senseless if we cannot choose freely. However, Smilansky (2000, pp. 124–132) and Pereboom (2001, pp. 199–207) counterargue that much of our understanding of interpersonal relationships would remain sensible under determinism. For example, although there is no place for moral indignation under determinism, there is still room for feeling hurt or shocked by another person’s behavior. Likewise, we might forgive another person in the sense that if we are convinced that the other has changed, his bad behavior will discontinue, and, thus, there is no need to distance ourselves from her. Brain science is irrelevant to all these issues in meaning of life research. Of course, presented here is only a brief sampling of the literature on the meaning of life. However, I submit that

it is representative of the field at large and that brain research lacks any bearing not only on Thagard's argument about what constitutes the meaning of life, but also on almost all other questions concerning the meaning of life. I contend that neurology is, by and large, irrelevant for discussions concerning the meaning of life.

There are, however, a few ways in which brain science may be relevant to discussions on the meaning of life. One such way has to do with determinism. As mentioned above, brain research has no bearing on the question whether determinism would make life meaningless, but it may have bearing on the question whether determinism holds. Perhaps neurological research could indicate, with time, that material processes in the brain completely determine our thoughts and feelings in a way that would corroborate hard determinism. Neurological arguments for or against determinism need not be conclusive; perhaps other determinist or anti-determinist arguments would override them. But even if that would be the case, such evidence from brain research would still be *relevant* to discussions concerning the truth of determinism, and thus (for those who think that determinism undermines life's meaning), for the question of the meaning of life.

Perhaps also neurology will reach one day the state in which we will be able to stimulate areas in the brain and thus give people who feel that life is meaningless a feeling that it is meaningful, just as we can do today, to an extent, for depression. Although the ability to affect cerebrally people's feelings and views concerning life's meaning has no bearing on the controversy between subjectivists and objectivists, or on discussions concerning what is in fact meaningful, it may be relevant for questions somewhat similar to those related to the treatment of depressed people: should all people who wish to undergo such treatment receive it? Should such treatments be financed by the state? Should some people who do not want to receive this treatment undergo it against their will (by sheer force, or perhaps through manipulation)? Brain research may be relevant for such discussions, which have to do both with applied ethics and the meaning of life, in a way that medical research has been relevant to moral decisions in biomedical ethics (for example, progress in genetic research has informed decisions on genetic engineering; fertility research has informed discussions on commercial surrogacy). This too would be a way in which brain science may be relevant for discussions on the meaning of life.

Of course, brain research, just as orthopedic or gastric research, as well as any other scientific and technological research, may help us improve people's lives by helping cure various sicknesses (such as the Parkinson disease) or in other practical ways. By this it would contribute to many people's well-being, and thus, according to many views as regards the meaning of life, also to enhancing the meaning of many people's lives. But such important progress should be distinguished, of course, from the relevance of brain science to meaning of life *research*.

I have presented here a few ways in which brain science may be relevant to meaning of life research. Perhaps there are also some other ways that I have missed. But I suggest that in almost all ways, including those mentioned by Thagard and those mentioned above, brain research is irrelevant to meaning of life research.

Most of the important questions as regards the meaning of life are not affected at all by neurology. This holds true not only for the present state of brain science but also for the most advanced one, if we shall ever arrive at it, when we would know about the brain absolutely everything that could be known about it, and would be able to correlate each and every thought or sensation, however minute, to processes in the brain. Such knowledge would be interesting in many ways but, contrary to Thagard's claim cited at the beginning of this paper, would be completely irrelevant for almost all of the important questions as regards the meaning of life. To decide about them, we need considerations from other fields. There is very little that we can learn from the brain about the meaning of life.

Acknowledgements

I am grateful to Paul Thagard and Saul Smilansky for their comments on earlier drafts of this paper. Special thanks to Mitch Herschbach for invaluable criticism and extremely helpful comments and suggestions.

Notes

- [1] Thagard also discusses briefly a number of other fields within and outside value theory, including ethics, political theory, metaphysics, and epistemology. In this paper however, I focus on the book's main topic—the meaning of life.
- [2] This, however, leaves unclear the status of unpaid housework, much discussed in feminist literature.
- [3] Some aspects of the argument for the irrelevance of neurology to most aspects of meaning of life research could be pertinent also with regard to other fields in value theory, but I will focus in this paper only on the meaning of life.
- [4] Thagard treats “life is meaningful” and “life is worth living” as interchangeable expressions, and moves from one to the other. For the purposes of the present discussion, I too will ignore differences between these two notions and follow his usage.
- [5] It is also unclear that the majority of people indeed hold the values that Thagard mentions. Individual autonomy, for example, has not been a common ideal in human history. For many centuries submissiveness and loyal servitude to those considered one's superiors and betters was considered normative. Likewise, many people's ideal of the good life is a long, lazy vacation in a luxurious country club where one need not show any type of competence or cope with any challenges.
- [6] Thagard's claim that some biological needs are “deep” is somewhat unclear, but I ignore this issue in the present context.

References

- Aristotle (1960). *Physics*. Vol. 1 (P.H. Wicksteed & F.M. Cornford, Trans.). Cambridge, MA: Harvard University Press.
- Baier, K. (2008). The meaning of life. In E.D. Klemke (Ed.), *The meaning of life* (3rd ed., pp. 82–113). New York: Oxford University Press.

- Bechtel, W. (2008). *Mental mechanisms: Philosophical perspectives on cognitive neuroscience*. New York: Routledge.
- Benatar, D. (2006). *Better never to have been: The harm of coming into existence*. Oxford: Clarendon.
- Bond, E.J. (1983). *Reason and value*. Cambridge: Cambridge University Press.
- Buber, M. (1937). *I and thou* (R.G. Smith, Trans.). Edinburgh: T. & T. Clark.
- Cottingham, J. (2003). *On the meaning of life*. New York: Routledge.
- Craver, C. (2007). *Explaining the brain: Mechanisms and the mosaic unity of neuroscience*. New York: Oxford University Press.
- Fischer, J.M. (1994). Why immortality is not so bad. *International Journal of Philosophical Studies*, 2, 257–270.
- Frankfurt, H. (2002). Reply to Susan Wolf. In S. Buss & L. Overton (Eds.), *The contours of agency: Essays on themes from Harry Frankfurt* (pp. 245–252). Cambridge, MA: MIT Press.
- Kant, I. (1998). *Critique of practical reason* (H.W. Cassirer, Trans.). Milwaukee, WI: Marquette University Press. (Original work published 1788.)
- Levinas, E. (1969). *Totality and infinity: An essay on exteriority* (A. Lingis, Trans.). Pittsburgh, PA: Duquesne University Press.
- McDremott, J.J. (1991). Why bother: Is life worth living? *Journal of Philosophy*, 88, 677–683.
- Metz, T. (2005). Baier and Cottingham on the meaning of life. *Disputatio*, 1, 251–264.
- Pereboom, D. (2001). *Living without free will*. Cambridge: Cambridge University Press.
- Sartre, J.-P. (1956). *Being and nothingness: An essay on phenomenological ontology* (H.E. Barnes, Trans.). New York: Philosophical Library.
- Smilansky, S. (2000). *Free will and illusion*. Oxford: Oxford University Press.
- Strawson, P.F. (1982). Freedom and resentment. In G. Watson (Ed.), *Free will* (pp. 59–80). Oxford: Oxford University Press.
- Taylor, C. (1992). *The ethics of authenticity*. Cambridge, MA: Harvard University Press.
- Trisel, B.A. (2002). Futility and the meaning of life debate. *Sorites*, 14, 67–80.
- Williams, B. (1973). The Makropulos case: Reflections on the tedium of immortality. In his *Problems of the self* (pp. 82–100). Cambridge: Cambridge University Press.