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Epicurus' Hedonic Algorithm

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ABSTRACT: This paper examines Epicurus' classification of desires found in his *Letter to Menoeceus* and *Principal Doctrines*. In this classification, desires are first sorted out into either natural or groundless. The natural are then sorted into either necessary or merely natural. Finally, those that are necessary are further broken down into necessary either for happiness, for comfort or for life itself. Recognizing the algorithmic quality of this classification, it is then shown how this algorithm relates to Epicurus' project, namely his attempt to demonstrate that what is good is easy to get. Since this is usually taken as an argument vouching for a life of poverty, what follows next is Epicurus' own rebuttal to this objection. Upon clarifying his goal, it is finally shown how this hedonic calculus promotes happiness, and how closely tied it is to Epicurus' understanding of philosophy.

KEY-WORDS:

RESUMO: Este artigo examina a classificação dos desejos presente tanto na *Carta a Meneceu* como nas *Principais Doutrinas* de Epicuro. Nesta classificação, os desejos são primeiramente divididos entre naturais e sem fundamento. Os naturais são então divididos entre necessários e meramente naturais. Finalmente, os necessários são subdivididos entre necessários para a felicidade, para o conforto ou para a própria sobrevivência. Reconhecendo a qualidade algorítmica desta classificação, demonstra-se então como este algoritmo se relaciona ao projeto de Epicuro, nomeadamente com sua tentativa de demonstrar que o que é bom é fácil de obter. Sendo isto muitas vezes tomado como um argumento em defesa de uma vida de pobreza, o que se segue é a própria refutação de Epicuro a esta objeção. Após este esclarecimento, mostra-se por fim como este cálculo hedônico promove a felicidade e o quão intimamente se conecta à forma como Epicuro entende a filosofia.

PALAVRAS-CHAVE:

Context

In both his *Letter to Menoeceus* and *Principal Doctrines*, Epicurus presents an interesting *classification of desires* according to their ground. The more necessary a desire, the more one should attend to it as it pertains to one's own well-being as a whole. In Epicurus' own words, contemplating these in this way “enables one to refer to every choice and avoidance to the health of the body and the freedom of the soul from disturbance” (1994, p. 30). Thus, this classification serves as a sort of *algorithm*¹ to determine how useful, or grounded, a desire is.

Now, we all have desires; we all have needs. Needs and desires are interconnected, as desires are but the call to action by some underlying need. The more basic the need, the more necessary its corresponding desire. This, in a nutshell, is how Epicurus understands the link between desires and needs.

The Hedonic Algorithm

Although desires give voice to needs, not all desires are grounded in *actual* needs. Here's Epicurus' short version of the whole thing:

of desires some are natural, some groundless; and of the natural desires some are necessary and some merely natural; and of the necessary, some are necessary for happiness and some for freeing the body from

¹ I'm using algorithm here in its broadest sense. From Donald Knuth's definition, that of “a finite set of rules that gives a sequence of operations for solving a specific type of problem” (apud Hill, 2016, p. 4) to Marvin Lee Minsky's, where algorithm is “an effective procedure [with] a set of rules which tell us, from moment to moment, how to behave” (apud Hill, 2016, p. 4).

troubles and some for life itself² (1994, p. 29–30).

Let's break this down schematically. First, desires are either

1. *natural*, or
2. *without natural grounds*.

Already implicit here is a value judgment. If a desire is not natural, then it's not really needed.³ Next, of those that are (1) natural, desires can either be

- 1.1 *necessary*, or
- 1.2 *merely natural*.

As before, there's a similar value judgment here. If merely natural, that desire is not really needed. Finally, of those that are (1.1) necessary, desires may be

- 1.1.1 *for happiness itself*,
- 1.1.2 *for comfort*, or
- 1.1.3 *for one's own survival*.

What is good is easy to get

Let's now look at the why this is presented like this by understanding the problem Epicurus is trying to solve. In his *Letter to*

²Epicurus presents a similar distinction in one of his *Sovran Maxims*, also known as *Principal Doctrines*. There he says that “[o]f our desires some are natural and necessary; others are natural, but not necessary; others, again, are neither natural nor necessary, but are due to illusory opinion” (1925, p. 673).

³This is a very condensed form of how Epicurus thinks desires. The thing is, desire has a function. A desire is a desire for something that gives us pleasure. And even though pleasure is good, there's no greater pleasure than that of having no needs. So in order to achieve the highest of pleasures, one only has to take into account those that are truly necessary. Consequently, of these, only the natural are truly necessary.

Menoceus, Epicurus discusses those that would later be known as *the four remedies*⁴. These, as best summed up by Philodemus⁵, are:

Don't fear god,
 Don't worry about death;
What is good is easy to get, and *What is terrible is easy to endure*⁶ (1994, p. vi, my emphasis).

These are four ways to address four distinct fears that prevent us from being truly happy. So Epicurus' algorithm is but a way to prove that *what is good is easy to get*. This means that to do so, he first has to show what he means by *good*. Only then he can weigh how much of that good is truly needed. As a known hedonist⁷, the good for Epicurus is obviously pleasure. Pleasure is what we desire the most.

Knowing that not all desires are born equal, Epicurus first has to sort them out according to the role they play in providing us with that pleasurable good. *Epicurus' Hedonic Algorithm* has precisely that function of sorting out irrelevant desires. This is basically a procedure to determine “what will happen to me if the object of my desire is

⁴In Greek τετραφάρμακος, or *tetrapharmakos*. This was how later Epicureans would refer to the four major Κύριαι Δόξαι, or *Kuriai Dóxai*, the *Principal Doctrines*. Apparently, it was called as such by Roman Epicureans, as they drew a clever parallel with an ancient Greek remedy with the same name, a compound of wax, pine resin, pitch and animal fat. To them, as the latter cured the body, the former cured the soul.

⁵Philodemus of Gadara (ca. 110–ca. 30 BCE), a student of Zeno of Sidon (ca. 150–ca. 75 BCE) at Athens, “was an Epicurean philosopher and epigrammatist” who later moved to Italy. “A self-proclaimed interpreter of Epicurus” (Blank, 2019) who described himself as an “orthodox Epicurean”, he “wrote on a wide range of topics, including epistemology, ethics, theology, aesthetics, logic and science, and the history of philosophy”. Curiously enough, and contrary to Lucretius, he left no writings on physics (Wurster, [s.d.]).

⁶Ἄφοβον ὁ θεός, ἀνύποπτον ὁ θάνατος καὶ τὰ γαθὸν μὲν εὔκμητον, τὸ δὲ δεινὸν εὐεκκαρτέρητον (Herculaneum Papyrus, 1005, 4.9-14).

⁷This is to be taken literally. “Epicurus was [indeed] a hedonist”. Why? Because “his writings, meager though they are, leave no doubt that he advanced the thesis that *obtaining pleasure and avoiding pain are the sole ultimate grounds on which anything is rationally pursued and desired, or rationally rejected*”. In other words, he is a hedonist because he takes pleasure and pain as “the sole ultimate values for a human being” (Cooper, 1999, p. 485, my emphases).

[fulfilled] and what if it is not” (Epicurus, 1926, p. 117). Here’s the flowchart of its procedure:

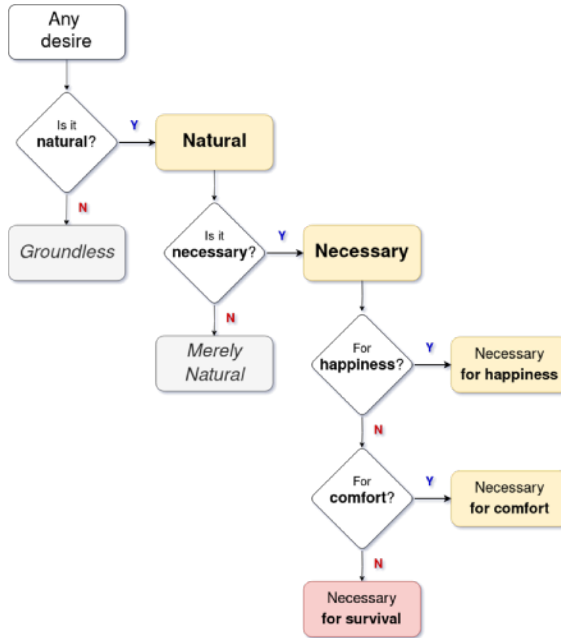


Figure 1: Epicurus' Hedonic Algorithm

It’s worthwhile noticing how at each step Epicurus gradually weeds out desires. After running the algorithm, the Epicurean tester will hopefully have a clearer idea about the meaning of their desires. Most should be disregarded as being unnecessary. As for the few still standing, these prove Epicurus’ initial point, i.e., that what’s really good it’s also really easy to get. Being both few and simple, their satisfaction demands little effort on our part. But what does this mean in practice? Let me now dry-run the algorithm a few times, showing you what kind of information the test provides.

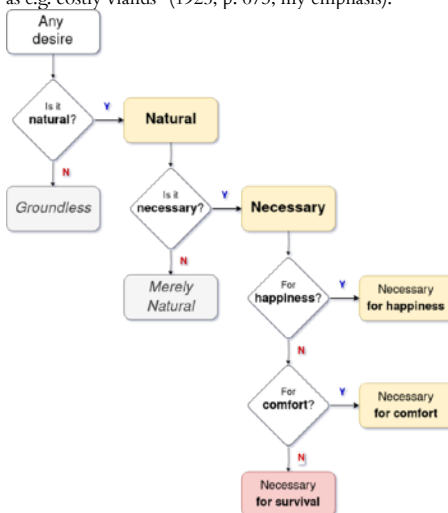
The first desires to be weeded out are the groundless. Say you were yearning for power, honor, and the like.⁸ According to the algorithm, these would fail the first test. They would be classified as groundless to the extent that they are not natural, i.e., they are not based in any actual need.

Now say you were craving more refined pleasures, such as having a meal at an expensive restaurant⁹. These would pass the first test, being grounded, but fail the second. Although not totally groundless, they would still be classified as *merely natural*.

For our third dry-run, let's imagine you had a desire for friends. According to the algorithm, this desire would pass the first and second tests, being neither *groundless* nor *merely natural*. But since having friends is “absolutely necessary if anyone is to attain *true happiness*” (Cooper, 1999, p. 501, my emphasis), this desire would test positive as

⁸ Diogenes Laertius points out that “by the *neither natural nor necessary* [Epicurus] means desires for crowns and the erection of statues in one's honour” (1925, p. 673, my emphasis).

⁹ By “*natural and not necessary* [Epicurus] means those which merely diversify the pleasure without removing the pain, as e.g. costly viands” (1925, p. 673, my emphasis).



necessary for happiness.

In our fourth try, say you were either too hot or too cold depending on the season. Both natural and necessary, this “instinctive desire to withdraw from what is causing [you] acute bodily pain” (1999, p. 501) would actually protect you. In this sense, this desire would test positive as *necessary for comfort*¹⁰.

For our final run, let's pretend you were either very thirsty or very hungry. Or perhaps that you were pressured at work, and you had already spent a few sleepless nights to catch up with your boss' demands. By necessity, these “naturally occurring desires for food and drink¹¹” (1999, p. 501) or sleep would have to be urgently satisfied. Failing to do so would simply put your life at risk. So according to algorithm, desires such as these would be classified by the self-explanatory *necessary for survival*.

By repeatedly running the algorithm, a pattern starts to emerge. Desires that are truly necessary are but a handful, demanding very little effort on our part to be completely satisfied. This makes the algorithm a powerful demonstration that *good* and *easy* go hand in hand. With this Epicurus proves his point. What's good is *demonstrably* easy to get.

Objection

Up to this point we have just considered the algorithm from the Epicurean perspective. Those already subscribing Epicurus' views have no doubt that what is good is easy to get. They know the simplest pleasures are also the most fulfilling. But are they really? Because all this

¹⁰Under this classification would also fall other similar comfort-related desires. Think of things such as needing to move the body after staying too long in the same place, or needing a break after reading a boring paper on ancient hedonic algorithms.

¹¹In Diogenes formulation, these desires are those that “bring relief from pain, as e.g. drink when we are thirsty” (LAERTIUS, 1925, p. 673).

talk about being happy with little only sounds praiseworthy to the lowest of the low. Perhaps this whole thing is but an elaborate rhetorical device to persuade you into becoming a hobo¹². For we all know that human beings don't just want to get by.¹³ There's more to life than simply satisfying our most basic needs.¹⁴ At face-value, this seems a fair objection.

This however is not the correct understanding of Epicurus' project. It was a common critique leveraged against his school, one Epicurus himself was perfectly aware of. That this is so we just have to go back to his *Letter to Menoeceus*. There, Epicurus specifically stresses that he believes "self-sufficiency is a great good"

not in order that *we might make do with few things under all circumstances*, but so that if we do not have a lot we can make do with few, being genuinely convinced that those who least need extravagance enjoy it most (1994, p. 30, my emphasis).

So no, Epicurus is not advocating for a life of poverty. By seeking self-sufficiency he is rather creating a safety-net of sorts. His goal is to make sure that even if we end up as hobos, we can still be happy. This provides two assurances. That we will be happy no matter what; and that we can be totally free of any worries, knowing we will always be happy. But there's more.

By following this hedonic algorithm, we will always know

¹² Writing on Epicureanism in *Philosophy Now*, Brian Dougall proposes what he calls "a modern day acceptability test". Its goal is precisely that of testing "Epicurus's idea of the good life". The problem he's trying to solve is that of becoming too "enamored with a philosopher's argument" to see its limitations. Before that happens, one should ask: "*Is this philosophy going to make me into a hobo?*". In other words, "Will I become a hobo if I accept Epicureanism"? Does Epicureanism promote a "Hobo Future? Yes", concludes Dougall. To him, "Epicureanism [fails] the hobo test" (2013).

¹³Cf. Abraham H. Maslow's *A Theory of Human Motivation* (1943), where he first describes his now famous *hierarchy of needs*.

¹⁴Cf. Socrates' city of pigs in Plato's *Politeia*, book II, 372d.

exactly what our desires mean. We will know which are necessary and which are not. That means we will have a deeper appreciation for whatever extra-pleasure may come our way. Knowing these are not necessary, we will have less attachment for those pleasures. Aware of that we will enjoy them more, as our enjoyment won't be tainted by fearing scarcity or loss. Always happy; happy always.

But is this really so? Let's check. Imagine we were invited to an open buffet. The sign on the door reads, 'Eat whatever you want, as much as you want'. How would we behave? Abiding by the hedonic algorithm, from the get-go we would know how little we truly need. But that wouldn't take away from having now this opportunity to try new things. Since our happiness would not depend on this one lucky event, we would simply enjoy it by what it is. We would be happy not for finally having it all, but simply for having it differently. No worries attached. Happy always; always happy.

The sober calculation

Living by the hedonic algorithm has four benefits. According to Epicurus, it

makes one completely healthy, makes man unhesitant in the face of life's necessary duties, puts us in a better condition for the times of extravagance which occasionally come along, and makes us fearless in the face of chance. (1994, p. 30).

In other words, the modest life derived algorithmically provides (1) health, (2) certainty, (3) satisfaction, and (4) fortitude. This "sober calculation which searches out the reasons for every choice and avoidance" (Epicurus, 1994, p. 31) thus allows for a truly pleasant life.

And it's a sober calculation¹⁵ in that it's a weighing of reasons for and against any potential choice.

This, in a nutshell, is how Epicurus understands philosophy. Its role is that of *provider of reasons*, mapping out options and their rational grounds. It allows for a better understanding of what we should or should not do. Hence to set out a proper procedure for action, i.e., an algorithm¹⁶. Only then can one consistently act prudently, and thus wisely. For only the wise are truly happy.

¹⁵This would later be called "*hedonic calculus*, or *calculus of pleasures*", being "the set of principles which would govern any system claiming that pleasures can be measured, added and, in general, systematically compared" (Proudfoot; Lacey, 2009, p. 52, my emphases).

¹⁶Cf. footnote 1.

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