Chapter 3
Some Conceptual Mistakes About Happiness

Abstract Common mistakes regarding happiness such as: happiness cannot be uni-dimensionally measured, happiness is relative, (the concept/nature of) happiness differs over different individuals, happiness cannot be cardinally measured and interpersonally compared (more in Chap. 5), etc. are refuted by considering the evolutionary origin of happiness.

3.1 Why Do We Have Happiness?

Since, by definition, happiness is a subjective affective feeling, one must be conscious to be capable of happiness or unhappiness. A necessary condition for consciousness is being alive. But being alive is not sufficient for being conscious. Living things are defined by the capacity for reproduction. A species may be able to reproduce without the capacity for consciousness.

Consciousness is a principal function of a (sufficiently advanced) brain. For humans, while our brain accounts for about 2–3% of our body weight, it consumes no less than 20% of our total energy consumption (and 85% of that of a sleeping newborn baby). Though many of our brain functions are at the sub-conscious or non-conscious levels, it is clear that consciousness must also be energy-requiring if not more so than our sub/non-conscious functions. We lose consciousness when our brain is not sufficiently supplied with blood. Thus, consciousness must contribute to fitness (for survival and reproduction) and this contribution must more than offset its disproportionate energy requirement for it to survive natural selection (or God's economizing).

How does consciousness contribute to fitness of the organism? It can do so only by affecting its activities. For example, if you are conscious of the imminent attack of a tiger but take no action to run away, such consciousness does not contribute to fitness. But why do we have consciousness that require a lot of energy, and have consciousness that affect activities? Why do we not directly affect the required activities (like running away) without the interim stage of consciousness? These direct actions/reactions are probably true for many lower forms of animals. It is also true for our reflex actions like the arm withdrawal reflex when our fingers are burned. This

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is the function of our spinal cord. The withdrawal happened before our conscious awareness of the withdrawal. Since actions without the mediation of consciousness are clearly feasible, why do we have consciousness then?

The answer is that for complex enough situations, evolution does not know in advance what actions are good for fitness. For the arm withdrawal reflex, in virtually 99.99% of cases, the best response is to withdraw. Thus, hard-wired arm withdrawal without the mediation of consciousness is best for fitness here. However, the same may not be true for more complex situations. Moreover, the evolution of more species made the environment more complex and hence made simple hard-wired behavioral patterns less fitness appropriate. In a complex situation, the number of all possible combinations of different factors that may affect the appropriate action is astronomical. It thus became too costly to program all the appropriate actions for the huge number of different possible contingencies.

No one knows how consciousness evolved from living things without consciousness. In fact, no one knows how consciousness is possible at all. This hard problem of 'from the material to the mental' is called the world knot and has been debated for more than a thousand years without conclusion. Two and a half decades ago, a well-known philosopher, Dennett (1995) published a book called *Consciousness Explained*. The title was probably made by the publishers instead of the author. I doubt that Dennett himself was arrogant enough to believe that he had consciousness explained. The title is eye-catching. I read and understand the whole book without having consciousness explained to me by even 0.01%! (Not counting our intuitive grasp of what consciousness is without already doing any reading.) Of course, I myself cannot explain it by even 0.000001%.

Once consciousness emerges, it serves the important function of making flexible choices. Instead of just relying on purely hard-wired instincts, on-the-spot decisions after the sizing up of the situation may also play a role. For example, if you see another animal, you may decide whether to 'fight', so that if you win, you get to eat it to enhance your survival; or 'flight' to avoid being eaten up yourself. This increases the fitness of those species capable of such conscious choices, especially when the environments became more complex. However, how did evolution/God ensure that conscious species use their conscious capacity to increase rather than decrease their fitness? This was achieved by endowing the conscious species capable of flexible choices to have affective feelings of happiness and unhappiness, pleasure and pain, or enjoyment and suffering. Activities consistent with survival and reproduction are rewarded with pleasure; opposite activities are penalized with pain. Thus, we find fresh, nutritious food very tasty, especially when we are hungry. The maximization of net happiness (excess of pleasure over pain) then serves as the criterion for a trade-off between different activities and motives, making pleasure the 'common currency' (Cabanac 1992); see also (Broom 2001; Ng 1995) on the evolution of pleasure and pain. From this, we may also infer that dogs, cats, and many other animals (all those capable of making flexible choices) also enjoy eating when hungry. Not only is interpersonal comparison of happiness possible (though with difficulties if precision is required), even interspecies comparison is also possible. (For more details, see Ng 1995, 2015; Carpendale 2015.)

On the other hand, the emergence of more species capable of making flexible choices made the environment more complex. This further created a pressure for the evolution of more rational species. This virtuous cycle partly (but still inadequately) explains the fast evolution on Earth to the level of Homo sapiens from non-living things in no more than about 4 billion years (Ng 1996).

My argument more than a quarter century ago, as outlined briefly above, has been supported by recent studies on the emergence of consciousness and affective feelings ('affective neuroscience'), which show that fundamentally similar brain structures support affective reactions in both animals (from amniotes to primates) and humans (e.g. Mashour and Alkire 2013; Blakemore and Vuilleumier 2017). 'There is now abundant experimental evidence indicating that all mammals (possibly many other vertebrates; in fact even invertebrates like crayfish have been found to have worries; see Fossat et al. 2014) have negatively and positively-valenced emotional networks concentrated in homologous brain regions that mediate affective experiences when animals are emotionally aroused. … These brain circuits are situated in homologous subcortical brain regions in all vertebrates tested. Thus, if one activates FEAR arousal circuits in rats, cats or primates, all exhibit similar fear responses' (Panksepp 2011; Abstract; see also Berridge and Kringelbach 2011; Jorge and Vuilleumier 2013; Lewis et al. 2014; Rickard and Vella-Brodrick 2014).

Knowing the evolutionary-biological basis of our capability for happiness helps us to understand happiness issues more deeply and helps us avoid some very common mistakes about happiness, as discussed in the next section.

3.2 Common Mistakes About Happiness

With our concept of happiness or welfare clarified, we now consider some common mistakes. First, many people, including happiness researchers, believe that happiness is multi-dimensional and cannot be reduced to, and measured in a single dimension. It must be conceded that a variety of factors affect happiness; the multi-dimensionality of happiness in this sense is clearly valid. Also, even happy feelings themselves may differ greatly. For one thing, our sense of deliciousness in taste is quite different from our sense of beauty in sight, and similarly for other different senses. Philosophers call them different qualia. The mistake concerns only the point that different happy feelings cannot be reduced into a single dimension to be comparable in terms of total amount, e.g. 'happiness is multi-dimensional and may not be fully assessed by one measure' (Holder and Klassen 2010, p. 426).

The saying 'you cannot compare apples and pears' has of course some validity. For example, you may be able to compare apples and pears in weight, but people care not just about their weights but also their prices, their tastes, their nutritional values, etc. Moreover, different individuals have different preferences in these factors. Thus, in this sense, saying that 'you cannot compare apples and pears' is correct, at least to some extent. However, we must not be absolute in this and regard apples and pears (or some other two items) as totally incomparable. Given a specific aspect

of interest, and given sufficient information, we can compare apples and pears. For example, if we just want to compare their relative nutritional values per dollar worth, we can do the comparison if we have enough information about their prices per kg and nutritional values per kg.

Similarly, different happy (and unhappy) feelings may be compared in terms of their significance for total happiness. Our definition of happiness above is one dimensional. For any given interval of time, the (net) happiness of an individual is measured uni-dimensionally by the areas above the line of neutrality minus the areas below that line, as illustrated in Fig. 1 discussed above (Chap. 1). A question arises as to whether an individual really can compare her different affective feelings in a single dimension, such as illustrated in Fig. 1. That an individual must largely be able (but subject to some imperfection as is true for all capabilities) to make such a comparison is ensured by the evolutionary origin of happiness, discussed in the previous section.

An individual in a species capable of flexible choice is often confronted with an either-or choice. If pleasure and pain are to guide fitness maximization, different types of such affective feelings must be capable of being translated into a uni-dimensional scale to allow comparison and choice consistent with fitness maximization. The pleasure of eating and that of having sex may be quite different in qualia, but an individual or a fox has to be able to compare them in a one-dimensional scale to guide the choice between fighting for mating with a female and chasing to eat a chicken. A lexicographical ordering like sex before food will not do. When you are too hungry, you cannot perform in sex! Food before sex will also not do; when you are not too hungry, forgoing a good opportunity to mate may reduce your fitness more than forgoing a meal. As the degree of hungriness varies continuously, you must be able to compare on a one-dimensional scale to choose in a way consistent with fitness maximization. What contributes to fitness (survival and reproduction) more should also yield more happiness to ensure that choices based on welfare maximization by an individual of a rational species are also roughly consistent with fitness maximization (Ng 1995, 2015).

The second common but questionable concept is that ‘happiness is relative’. This is correct in some sense as happiness is affected by relative comparison. However, many believe that “the state of ‘happiness’ [itself] is relative” (Chester 2008), which makes the scientific study of happiness almost impossible, if such beliefs are strictly adhered to. A similarly questionable belief is that happiness and/or ‘the concept of happiness differs from person to person’ (Guillen-Royo and Velazco 2012, p. 264); see also McGregor and Goldsmith (1998), Uchida (2010).

Consider, ‘When younger, happiness stems more from excitement; however, as one gets older, happiness stems more from feeling peaceful’ (Mogilner et al. 2011). Moagilner interprets this as evidence for the ‘Shifting Meaning of Happiness’. However, it is just that the factors affecting one’s happiness may differ for different people with the passage of time and age.

This interesting finding of Mogilner et al. is likely to be universal as well and the reason is likely to be biological. As shown by Ng (1991), due to the cumulative nature of knowledge, it is more important for the young to learn more as their accumulated

knowledge is still relatively low and the added knowledge could be used longer; due to the complementarity nature of learning and being adventurous, it is more important for the young to be willing to be adventurous and risk-taking. Thus, we are programmed to derive high happiness from the excitement of taking adventures and risks when young. When we are old, learning is no longer very important; it is then more important to avoid risks and hence, older people derive more happiness from peacefulness.

Even within a species like Homo sapiens, due to differences in individual constitution, experience, culture, education, etc., different individuals may achieve happiness differently and the same factors may affect the happiness of different individuals differently. However, even in this respect, individual differences have been exaggerated. Thus, after reviewing substantial research results, a veteran happiness researcher (Veenhoven 2010a, p. 617) concludes, 'These findings fit the theory that happiness depends very much on the degree to which living conditions fit **universal** human *needs* (liveability theory). They do not fit the theory that happiness depends on culturally variable *wants* (comparison theory) or that happiness is geared by cultural-specific ideas about life (folklore theory).' (Italics original; bold and underline added; see also (Veenhoven 2010b)). Similarly, the finding on the importance of good government for happiness 'is apparently independent of culture' (Ott 2010); the same is true for many other aspects of happiness (e.g. Agbo and Ome 2017).

Another piece of evidence in favour of universality and that cultural differences are not that important is that the many differences between immigrants and local residents are largely reduced, if not eliminated, in just one generation (Yann et al. 2010). Esser (2006, p. 38) concludes that 'the second generation [of immigrants] virtually makes a jump to assimilation … and this finding is stable across all immigrant groups, all cohorts and all periodic fluctuations.' Different but related measures also show similar cross-country similarity (e.g. see Torsheim et al. 2012). It is thus unsurprising that, 'Even if we classify individual affective feelings into different classes such as instinctive, social, and we-world, total happiness may still be represented uni-dimensionally' (Yu and Jiang 2012, p. 977, note 14; 于席正&江莉莉 2012). Also, empirically, 'There is increasing evidence that uni-dimensional well-being models often report comparable and sometimes better fit to multi-dimensional and hierarchical models' (Burns 2020, Abstract).

As different members of the same species, we share many basic biological similarities, including what make us happy and unhappy. Strictly speaking, it is also a mistake (but a lesser one) to say that happiness is relative. Happiness and unhappiness/pain are absolute. However, relative standing, comparisons both to others and to one's own past, and adaptation are very important in affecting happiness, leading people to misleadingly say that 'happiness is relative'. These and other important factors affecting happiness are discussed further in later chapters. Other questionable beliefs such as happiness is not measurable, happiness cannot be cardinally measured, happiness is not interpersonally comparable are discussed in Chap. 6.

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