# Is There a Problem With False Hope?

## BERT MUSSCHENGA\*

Vrije Universiteit, Amsterdam, The Netherlands

\*Address correspondence to: Bert Musschenga, PhD, Department of Philosophy, Vrije Universiteit, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands. E-mail: a.w.musschenga@vu.nl

This article offers a general discussion of the concept of false hope. Its ultimate aim is to clarify the meaning and the relevance of that concept for medicine and medical research. In the first part (Sections I–V), the concept of hope is discussed. I argue that hope is more than a combination of a desire and a belief about the probability that the desire will be fulfilled. Imagination and anticipation are as well components of hope. I also discuss if hope implies orientation to action. In the second part (Sections VI–VIII), I examine the concept of false hope. I show that hope is false if it cannot be justified epistemically. There is, I argue, an intimate relation between false hope and ignorance. Hope is justified—"realistic"—when the hoping person knows and accepts experts' judgement about the probability of hope fulfillment. I then argue that what matters for evaluating a person's hope is not only whether it is realistic, but also whether it is reasonable in the light of the aim and goals that a person strives for in (the remainder of) his life. Part three (Sections IX and X) goes into the question of what is morally wrong about having or causing false hope. In the fourth part (Sections XI and XII), the relevance is shown of the insights from the previous parts for the debate on false hope in medicine and clinical research.

**Keywords:** anticipation, (false, realistic) hope, (culpable, inculpable) ignorance, imagination, medical research, medical treatments, probability, resignation, therapeutic misconception

#### I. INTRODUCTION

Hope is a term frequently used in everyday situations, including existential crisis situations. "I am hopeful that we will get the house at that price," a

© The Author(s) 2019. Published by Oxford University Press on behalf of the Journal of Medicine and Philosophy Inc.This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact journals.permissions@oup.com

woman says to her friend after they have made an offer on a house. "There is still hope!" says the doctor to a man whose wife was taken to a hospital after a massive cerebral hemorrhage. Being a Dutch citizen, I hope that the Netherlands will be spared from terrorist attacks. Besides hope, we also have the term "false hope" which clearly has a negative connotation. In the discussion in the Netherlands about the "Bed, bread and bath"-scheme for illegal immigrants, it was repeatedly said that one should not give asylum seekers false hope. Hope for a better life encourages tens of thousands of people to leave their homes and to begin a gruesome journey through many countries toward a future which—they think—will be better than the insecurity, poverty, and hopelessness in which they live. According to some, their hope is usually false. Hope of postponing death increasingly drives many who suffer from a lethal disease to undergo new treatments, including experimental yet insufficiently tested treatments. Their hope is also often called false. But when is hope false? Is it bad to have false hope? Is it better to have no hope than false hope? This article explores these questions. In the first part (Sections I-V), I discuss the components of the concept of hope. In the second part (Sections VI–VIII), the concept of false hope is discussed. Part three (Sections IX and X) goes into the question of what is morally wrong about having or causing false hope? In the fourth part (Sections XI and XII), the relevance is shown of the insights from the previous parts for the debate on false hope in medicine and medical research.

## II. WHAT IS HOPE?

Many important thinkers have discussed hope, but only a few of them have made hope the central theme of their thinking. For most thinkers, hope is just one of the themes to which they pay attention. When we classify them according to the tradition to which they belong, it is mainly thinkers of the Continental phenomenological tradition such as Marcel and Pieper who deal with basic hope—hope in existential crisis situations. Another classification of thinkers places emphasis either on what hope is and when we hope or for what we (may) hope. The last question is primarily discussed by theologians or philosophers from the Christian tradition. Because my focus is on what distinguishes false hope from hope, I largely restrict myself to a philosophical tradition that offers the best tools for dealing with that question: the analytic tradition. My starting point is the definition by John Patrick Day (1969) who departs from David Hume's (1896) ideas about hope.

According to Hume, hope and its counterpart, fear, are emotions—passions. Both are mixtures of two different emotions, pain, and pleasure. He relates pain with the term "grief" and pleasure with the term "joy." If something that, when certain, would make us pleased is uncertain and only probable, then it brings us hope. If something that, when certain, would bring us

grief is uncertain and only probable, then it brings us fear. Hume's original insight is that probability is the cause of hope and fear:

Tis a probable good or evil, that commonly produces hope or fear; because probability, being a wavering and inconstant method of surveying an object, causes naturally a like mixture and uncertainty of passion. (1896, Book II, Part III, Section IX)

Day follows Hume in his ideas about the role of probability in hope. Contrary to Hume, hope and fear are for Day not themselves mixtures of the emotions joy and grief, but they bring these emotions along. Hope consists not of one, but two elements: a desire for something (conative aspect) and a belief regarding the likelihood of fulfilling that desire (cognitive aspect). When Hume says that hope and fear cannot occur together, Day says it is possible. Mixed feelings do exist. Those who hope to win are at the same time afraid to lose. Both elements of hope are, according to Day, expressed in the following basic statement, which in my free interpretation reads as follows:

The statement "A hopes that p" is true iff "A desires that p (is fulfilled), and A thinks that there is—however small—a chance that p (will be fulfilled)" is true.<sup>3</sup>

For Day, "desire" and "belief that the probability of fulfilment is greater than 0 and less than 1" are both necessary conditions for hope. Together, they form a sufficient condition. This view is shared by another influential English philosopher, Robert Downie. Day's definition is not undisputed. Some of Day's critics find that hope has nothing to do with probability, whereas others believe that the definition is incomplete. I will briefly discuss both forms of criticism.

## III. HOPE AND PROBABILITY

The uncertainty that desires will be fulfilled is for Hume the cause of hope. Uncertainty means that the probability of fulfillment is greater than 0 (0 = impossible) and less than 1 (1 = certain). In this approach, hoping is not irrational. However, some thinkers hold the opinion that hope is basically something irrational. Nicholas Smith (2008) refers to a statement by the Belgian philosopher of science Isabelle Stengers, known for her publications—with Ilya Prigogine—about chaos theory, which she said in an interview: "If we follow [the] probability, there is no hope" (Stengers, 2002, 245). In her view, one can only be said to hope for a thing or a state of affairs if a rational calculation of chances and probability indicates that it makes no sense to desire that thing or state of affairs. Hope goes beyond rationality. To give an example of what she might mean: No one has ever returned from death. This does not prevent Peter from hoping that he will be the first to come back.

Is Stengers right? Suppose that 5 million Dutch people buy a lottery ticket. The chance of winning the prize is 1:5 million. Rationally speaking, buying a ticket is a waste of money, but I suspect that only a few people decide to buy a ticket after making a rational calculation of the probability of winning. Still, all participants hope that they hit the jackpot. Why else would they take part in the lottery? All that matters to them is that it is possible that they hit the jackpot. I do not deny that people sometimes deliberately do not want to know the probability of winning so as not to get discouraged. Yet, even those people must not only believe that it is possible that their desire gets fulfilled, but also-at least implicitly-assume that the chance of winning is greater than zero. As Hume said, the question of when I can be said to hope for something cannot be answered without referring to probability. For Hume, Day, and Downie, having a desire for p and believing that the probability of fulfillment of p is >0 and <1 are both necessary conditions for hoping p. I agree with them. Now does this also constitute a sufficient condition, as they claim? Various contemporary authors deny that. I limit myself to discussing two proposals for completing these two conditions with other elements: the elements "imagination and anticipation" and "action orientation."

# IV. HOPE, IMAGINATION, AND ANTICIPATION

First, I will discuss the element that I call imagination and anticipation. Spinoza calls hope a feeling of unstable joy generated by the image of a future or of a thing in the future or in the past (1985, Part III, thesis XVIII, note 2). Are imagination and anticipation essential to hope? Jan gives a party for his friends. Late in the evening Clara, a good friend, appears. "Did you hope I would come?" she asks Jan. He replies that he had expected that she would come and that he is glad that she is there. Clara is not satisfied with that answer. She responds by saying: "I don't want to know if you expected me to come, but if you had *hoped* that I would come." Suppose that Jan had neither thought of Clara and nor wished that she would come. Could he then in good faith answer that he had hoped for her to come? It seems clear that the answer would be negative. If he had really hoped that she would come, he might perhaps have noticed she was still not there and might have wondered whether she would still come. This example makes it clear that hope is more than the sum of an uncertain expectation and a desire. What is needed in addition, says Luc Bovens, is "mental imaging." A prerequisite for hope is that you imagine from time to time what you hope. That is what Martin Luther King did when he said he had a dream (Bovens, 1999, 674). Those who say they hope for a better world, but never devote a single thought to it, do not really hope for it. A woman who is pregnant does not wait until the child arrives, but tries to imagine what the child will look like and what it will be like to be a mother. She does not wait, but anticipates a future situation (Waterworth, 2004).<sup>5</sup>

## V. HOPE BETWEEN RESIGNATION AND ACTION

The next element I want to discuss is what I call, for lack of a better term, the action orientation of hope. Suppose I hope to become very old. What precisely it means to be very old, I do not know. Moreover, I consider it more or less likely that I will reach old age, but whether that will happen I also do not know. I am aware that what age I will reach depends on many factors beyond my control. Because of that lack of total control, Ariel Meirav (2009) characterizes hope as a resignating desire. Speaking of resignating hope does not mean, says Meirav, that the desire cannot be fulfilled, but that one does not have total control over the fulfillment of the desire. This does not mean that it is completely impossible to exert any influence at all (Meirav, 2009, 229). Having a resignating desire implies recognizing that something other than yourself—an external factor—will determine the fulfillment of your desire. Hope is believing that this external factor will play a positive role.<sup>6</sup>

Is Meirav right when he emphasizes that hope means admitting not having total control over the fulfillment of a desire? If I apply for a grant for the research I want to do on the determination of the risk-benefit ratio in clinical studies, I hope that it will be honored, even when the chance is perhaps only 10%. The influence I can have on the outcome is very modest. But if I do my part badly, the chance of the application being honored becomes even smaller. Other authors therefore emphasize that hoping implies striving to do whatever is possible to do. We must, says Victoria McGeer (2004), learn that the limitations that we experience when trying to realize a desire should not be seen as limitations of our causal influence, but as side-constraints that we can move when acting. Hope is the energy and direction that we can offer, not only making the world into how we want it to be, but regulating and developing our capacities to act. Hoping is to offer the motivational force for using and developing our abilities to fulfill our desires. Hoping is using our abilities to be imaginatively and constructively engaged in the world around us, even in the face of our limitations. Hope is inseparably connected to the belief in self-empowerment. We find a similar view in Philip Pettit (2004). He says that substantial, non-superficial hope is based on a cognitive decision—a volition—to act as if the desired prospect will become a reality or at least as if it has a good chance to be realized. Just as taking preventive measures means acting as if that which is feared will happen.

For McGeer and Pettit, hope seems necessarily to be active hope. Those who hope commit themselves to do what is possible. However, for Meirav hope seems to be mostly passive hope. The active conception of hope is supported by the "hope theory" of the American psychologist Charles Snyder.<sup>7</sup> He considers hope as a process of thinking. Hope is primarily a combination of thinking about goals and thinking about pathways that can be followed to achieve those goals. Moreover, hope is also "agency thinking"—thinking that focuses on the person's abilities to find ways that lead to the desired goals, and to keep following those ways. "Agency thinking" especially occurs if one is confronted by obstacles and difficulties, and then one must also provide and channel the mental energy (motivation) to overcome them. Thinking about goals and about pathways to those goals occurs repeatedly, and they cross-fertilize each other.<sup>8</sup>

The active and passive visions of hope are not mutually exclusive. Although the view of hope as resignating desire emphasizes recognizing the limitations of one's own influence, it is consistent with the recognition that accepting not having total control over the fulfillment of a desire does not exclude being active where one can still exert some influence. McGeer, a supporter of the concept of hope as active hope, is well aware that hope cannot operate without insight into the limited opportunities one has to influence the achievement of that for which one hopes. She also emphasizes that it is imperative to act where and when this is possible, and to develop capacities for acting constructively and creatively. My conclusion regarding the claim that hope needs to be orientated to action is that hope is not necessarily active hope. Hoping does imply acting where possible and adopting an attitude of resignation when acting is no longer an option. If two men compete for the hand of the same woman, there comes a time when they can only hope that the woman's choice will be in their favor. However, if they had not fought before that time to get the woman's favor, one might have wondered how strong and sincere their desire was to win her.

If we accept the two discussed additional components, we come to the following definition of hope: The statement "A person S hopes that p" (a thing or an event) if and only if he or she:

- (1) desires that p;
- (2) (implicitly or explicitly) thinks that the probability that *p* being realized is greater than 0 and less than 1;
- (3) imagines how it will be if p is realized
- (4) anticipates it; and
- (5) is actively working to bring about *p* where possible, and where this is not possible resigns thereto.

## VI. TRUE AND FALSE HOPE

Snyder—the father of "hope theory"—wrote with some colleagues an important article about false hope (Snyder et al., 2002). Many people, they say, claim that true hope is grounded in reality whereas false hope results from

significant distortions of reality. According to Snyder et al., people with "high hope"—a high degree of hope—are not guilty of distorting reality. However, they do have positive illusions. They have a too positive view of themselves, reality, and their possibilities and opportunities. People with "low hope" little hope—are the ones who suffer from distortion of reality, as well as processes of denial and repression, according to Snyder et al. People with "high hope" stay within what the psychologist Roy Baumeister (1989) calls the "optimal margin of illusion." Their illusions have beneficial effects and improve their adaptation to reality. According to Snyder et al., false hope is also associated with the pursuit of too many objectives at the same time or by choosing the wrong paths to achieve one's goal. Even those phenomena do not occur among people with "high hopes." They conclude that false hope does not exist, by which they mean that false hope is absent among people who really hope—who have "high hopes." However, one of the premises which Snyder et al. assume is that positive illusions do not distort reality, but only color reality in a way that benefits the one who hopes. The difference between coloring and bias seems to be exclusively based on the quality of the effects on the welfare of the person who hopes.

Snyder et al. suggest that the counterpart of false hope is true hope—hope that is free from distortions of reality, but not free from beneficial positive illusions. This conception of true hope seems to rest on the assumption that it is not only possible to distinguish between views that distort reality and views that positively color reality, but also between views that distort and do not distort reality. Although it might be possible to agree to a certain extent on which views distort reality, the possibility of an agreement on an undistorted view of reality seems to be an illusion.

A more fruitful approach to false hope ties in with Day's distinction between having hope and having justified hope (Day, 1991, 76-80). As we have seen, hope has two elements: a desire and a belief (about the probability of fulfillment of the desire). The justification of hope is directed at both elements. Hope is, according to Day, justified if it can be shown (1) that no objections are possible to the object of desire on moral, prudential, or aesthetic grounds (= conative element), and if it can be shown (2) that hope is reasonable (realistic) (= cognitive element). The criterion for reasonability is the intersubjective judgement of competent judges about the probability of the fulfillment of what is hoped for. I call justification of the conative element of hope normative justification and justification of the cognitive element epistemic justification. False hope is an epistemic concept. Only epistemic justification is relevant for determining if hope is false. Epistemologists distinguish between true belief, justified belief, and true and justified belief. Justified belief can nonetheless be false. Applying the same distinctions to hope, we get true hope, justified hope, and true and justified hope. False hope would then be the counterpart of true hope. However, since the belief that is part of hope is not a statement of fact, but a probability statement,

from an epistemic point of view hope cannot be true, it can only *become* true. Neither can hope be false, it can only *turn out* to be false. Hope changes into certainty as soon as it has become either true or false. If stating that S's hope for x is false is not a descriptive but a predictive statement, what is then the practical use of such statements? Is it only a warning for becoming disappointed? My proposal is to reinterpret false hope as epistemically unjustified hope. Saying to someone that her hope is false should then be regarded as a call for critically examining the grounds of her hope.

## VII. FALSE HOPE AND IGNORANCE

If false hope should be conceived as unjustified hope, what is the cause of this lack of justification? In my view, ignorance is the cause, the lack of relevant information about the chances that the desire that constitutes hope will be realized. To illustrate the role of ignorance in false hope, here are some examples. Emma is an unhappy young woman without friends and admirers. She thinks that her unhappiness is due to her physical unattractiveness and plain looks. She decides to consult a cosmetic surgeon who advises her to have a breast enlargement and a facial surgery of mouth, jaw, and nose. These operations indeed make her more attractive and liked. Although satisfied with these changes, she still feels unhappy. After consulting a psychotherapist, it becomes clear to her that the causes of unhappiness should be sought in neglect during her childhood. Emma's false hope with regard to the effects of cosmetic surgery were caused by ignorance concerning the real nature of her problems. Another example: Peter applies for a research grant at an organization for scientific research for a study on the ethics of phase-1 trials. Two of the reviewers gave the application the highest rating (A +) and one a slightly lower rating (A). On the basis of the very enthusiastic reports of all three, Peter had good hope that the grant would be awarded. His hope was false because he did not know the policy that applications that do not have three A + are rejected automatically. A third example: Shania, an obese woman of 43 years, wants to lose weight. She hopes to lose 30% of her weight. However, after treatment, she has only lost 16 kg. As with many other women in her situation, she is disappointed with the result of the treatment. The cause of their false hope is lack of knowledge and insight about the difficulty of losing weight. Overweight dieters tend to believe that weight is malleable (Polivy, 2001).

People with false hope base their hope on an assessment of the probability of fulfillment that does not correspond to what Day would call the standard assessment of competent judges. False hope results from cognitive deficiency, from ignorance. The example of Emma shows that false hope not only results from an unjustified *belief* about the likelihood of fulfilling a desire, but also from an unjustified *desire*. Hope can also be false if it is based

on an incorrect picture of the value, the desirability of the object of desire, in Emma's case cosmetic surgery.

If false hope is indeed based on ignorance, hope must disappear when the ignorance is lifted. Many refugees set forth to a country in Europe where they hoped to be welcomed and have the possibility to build a new life. They often started out ignorant of the many dangers and problems they would meet. It turned out that their journey was more costly and more dangerous than they expected and that they were not welcome in a lot of countries. It seems evident that their hope was false. However, although some of these refugees might not have gone had they known beforehand what would happen to them, I suspect that many of them would still have gone. The majority of the refugees would probably still have hope, even when they were no longer ignorant but well informed. It is important to make a distinction between hope that is based on ignorance and hope that goes along with ignorance without being based on it. Hope can only be called false when it is based on ignorance. The hope of the majority of refugees goes along with ignorance but is not based on it. Therefore, it cannot be called false hope.

## VIII. REALISTIC AND REASONABLE HOPE

If false hope is based on ignorance, its counterpart seems to be well-informed hope. However, having all the information one needs for making a decision does not mean that one also takes all the information into account. Knowing the probability of the realization of a desire is not the same as being well aware of it. Someone who hopes for a job, knows that the probability that she gets it is 10%, but is already looking for a house in the vicinity of the location of her future employer, demonstrates that she is not very aware of the low probability. Her hope is not *realistic*. Realistic hope is the term I prefer for the counterpart of false hope over well-informed hope. Determining if hope is realistic is, as we have seen for Day, one of the aims of justifying hope. His criterion for justification of hope is the intersubjective judgement of competent judges about the probability of the fulfillment of what is hoped for. I do not think that experts' judgement about the probability of hope fulfillment is the only thing that matters for evaluating hope. The following example makes this clear. Andrea and Johan have both applied for a job. They are both aware that their chances are no more than 10%. Contrary to Andrea, Johan still hopes to get the job. The explanation is that they have a different threshold for the acceptability of the probability of fulfillment of hope. Andrea's threshold is much higher than that of Johan. She continues hoping when Johan finds the low probability a reason to give up hoping. Judgements about what an acceptable threshold is are not objective but person-relative.9 Experts assess the probability of desire fulfillment, not the acceptability of thresholds of the chances for desire fulfillment. Johan's hope is realistic. It would have been false if he could only keep hoping when

rejecting the experts' assessment of the probability of the realization of the desire as too low. What matters beside hope being realistic is if it is *reasonable* in light of the purposes that the person who hopes is striving for. Hoping for the job is reasonable for Johan because it would give him the opportunity to realize his deepest aspirations whereas it is not realistic for Andrea, for whom it means no more than fun and well-paid work. Refugees' hope for getting a better life in Europe is realistic if they accept the low chance. It is reasonable if there no alternative available. <sup>10</sup>

It is time for an interim balance. I argued that false hope is hope that cannot be justified epistemically. False hope is hope that is based on ignorance. Hope is justified when the hoping person knows and accepts experts' judgement about the probability of hope fulfillment. Justification determines if hope is realistic. What matters for evaluating someone's hope is not only whether it is realistic, but also whether it is reasonable.

## IX. IS HAVING FALSE HOPE MORALLY WRONG OR BAD?

Although it is strange to ask whether having or instilling hope is morally desirable or undesirable, in the case of false hope it is a legitimate question. If false hope is a moral problem, having or instilling it should be counteracted.

False hope can occur in various situations and contexts. Some people are possibly more susceptible to having false hope than others, but no one is immune. The moral evaluation of false hope can be approached from two ethical points of view. One point of view is to look at the ratio between positive and negative effects of false hope as a form of hoping, first of all for the well-being of the person who hopes, but also of his or her social environment. That is the consequentialist perspective: When the positive effects of having false hope exceed the negative ones, the right thing to do is to promote false hope. The other point of view combines elements of the virtue-ethical perspective and the deontological perspective. False hope can be caused by either the actions, omissions, and vices of the bearer of hope, or by the actions, omissions, and vices of other persons. Deontology evaluates the intrinsic value of the actions and omissions resulting in false hope. Virtue ethics looks at the moral quality—the character—of the actors.

I start with the consequentialist perspective, which focuses on the effects of hoping, first of all for the well-being of the hoping person. Psychological studies show associations between self-reported hopefulness and academic achievement, athletic performance, physical health, and wellness, coping with illness and loss, psychological adjustment, social-emotional problem-solving, and the quality of interpersonal relationships (Rand and Cheavens, 2009). Hope can have positive as well as negative effects. The negative effects of hope are limited to the disappointment and frustration that occur when the hope does not materialize. This also applies to false hope. Some

psychologists think that it does not matter whether hope is false, because all hope that does not come true turns out to be false (Lazarus, 1999). This view seems to be wrong because it is plausible to assume that the feelings of frustration and disappointment may be bigger and more destructive if it appears that the hope was false. If someone who hopes for a job does not get that job, she will be frustrated. She will be extra frustrated if it turns out that her hope was false, that she was wrong in assuming that she had a chance when she did not have a chance from the very beginning.

From a consequentialist perspective, false hope only becomes a moral problem when the negative effects outweigh the positive ones. Consequentialists, however, do not pay attention to the causes of false hope. As I argued in Section VII, false hope results from a cognitive deficiency, a form of ignorance. Contrary to a consequentialist perspective, a moral evaluation of false hope from a virtue-ethical and deontological perspective also looks at the sources and the causes of the ignorance that are connected with it. Ignorance can result from the actions, omissions, and the character of either the hoping person him or herself or of others. Ignorance caused by the actor him or herself can either be culpable or not culpable. Ignorance is culpable when a person has made insufficient effort to take notice of available information or to collect information necessary for making responsible choices. If a motorist killed a child because the brakes of his car were worn—a fact he was not aware of—his ignorance is culpable. He can be accused of negligence, because motorists are required to have their brakes checked regularly. When a motorist causes a bomb explosion by running into a wire stretched across a road, his ignorance is not culpable because there is no obligation to check whether there are wires stretched over the road, unless he knew that he was driving within a war zone.

Does the falsity of hope affect the moral character of hope—universally regarded as a virtue—if it results from actions, omissions, or the character of the hoping person? Does it make false hope a bad thing? Ignorance, the source of false hope, rarely flows from an intentional decision to shield oneself from information or not to collect information relevant for making decisions. It is more common that it is caused by both epistemic and moral vices such as laziness, carelessness, and sloppiness. False hope caused by such vices is clearly blameworthy when it leads to harming the interests of others. Think of the father who decides to leave his country with his family during a war, without informing himself about the best routes and the best destination. If by taking another route he could have avoided crossing the Mediterranean Sea on a dangerous ship, he is morally responsible when his family drowns. Should we also blame a person for his or her ignorancebased false hope if it does not cause any harm to others? Imagine that a young unmarried woman suddenly decides to leave Syria and starts out for Germany without careful preparation, hoping that she will be welcomed with hospitality. She falls into the hands of a criminal gang who demands that she pay €5,000 for crossing the Mediterranean by boat from Libya to Italy. However, the criminals just cash the money and disappear, leaving her behind without a penny. Did she commit a moral wrong by leaving uninformed and unprepared? What she did was, although morally permissible, certainly not virtuous. Her ignorance was culpable.

Some forms of ignorance are not easy to classify as either inculpable or culpable. I especially have in mind ignorance that results from self-deception. According to Alfred Mele, self-deception occurs when people have a belief p, and only if p is false, that is formed in a "suitable biased way" (Mele, 2001, 120). Examples are positive or negative misinterpretation of information, selectively dividing attention and selectively collecting evidence. The wife of a sailor whose ship perished years ago can continue hoping that he comes back, as long as his body is not found. However, that is extremely unlikely since the ship sank at a place where the sea is 1-km deep. Her hope, originating from self-deception, is false. Self-deception might be seen as morally permissible as long as it does not harm a person's own interests and welfare or that of others (Martin, 1986). Let us assume that the wife of the sailor invests all her energy in the search for her husband while neglecting her children and other obligations such as her job. Can we hold her morally responsible for these undesirable consequences of her false hope? Opinions diverge on this issue. Mele (2001, 103) argues that many sources of bias are controllable and that self-deceivers can recognize and resist the influence of emotion and desire on their belief acquisition and retention, particularly in matters they deem to be important, moral or otherwise. Neil Levy (2004, 309), however, finds that, since it is rarely the case that self-deceivers possess the requisite awareness of the biasing mechanisms operating to produce their self-deceptive belief, they are unable to curb the effects of these mechanisms.

## X. IS CAUSING FALSE HOPE MORALLY WRONG?

In many cases of inculpable ignorance, it is still possible to designate someone who is responsible for the actor's ignorance. How should we judge those who cause false hope in the hoping person? When a motorist's car had been in the garage for maintenance, but the mechanic failed to alert her that the brakes had to be replaced, the cause of her ignorance was the negligence of the mechanic. The mechanic may have deliberately failed to inform the motorist because he hoped that she would crash with the car. This is a clear case of malicious intent. Omitting information need not be motivated by malice. It can be done with the best intentions. A father may conceal from his son a letter informing that he is not admitted to a master's program at one of the leading universities. He wants his son to keep hoping that he has a chance to be admitted. He does so in order not to spoil his son's holiday.

The father acts morally wrongly. It is contrary to the principle of respect for autonomy to keep someone ignorant by withholding information, even with the best intentions. The son does not get the opportunity to draw his own conclusions from the information that is kept from him. The father's act is also morally wrong from a consequentialist perspective because he can expect that the son will not only be frustrated but will also feel deceived if he hears that the letter was already delivered before their holidays.

More complicated are cases in which others have the opportunity to expose false hope caused by self-deception. One could argue that it is morally wrong not to expose the sailor's wife's self-deception and her false hope, even with the best intentions. However sad the truth may be, she should get the chance to resume her life in an autonomous way after accepting that her husband should be considered dead. Not exposing the wife's false hope is prima facie wrong. There might be circumstances that justify an exception. The sailor's wife might be so extremely unstable that she cannot bear the truth without completely breaking down mentally. In such a case, the moral wrong of causing a breakdown outweighs the moral wrong of not telling the truth.

I argued that causing someone to hope falsely is prima facie wrong. So is not exposing false hope. Having false hope is morally wrong if the hope is based on culpable ignorance and may harm the interests of others. False hope that does not affect the interests of others is morally permissible but not virtuous.

## XI. FALSE HOPE AND MEDICAL TREATMENTS

False hope is a topic frequently discussed within the medical community. In this section, I discuss false hope in the context of decisions about treatments that are a matter of life and death. In the next section, I turn to false hope in the context of medical research. In the context of treatments, false hope is related to the chance that a treatment results in a cure, prolongation of life, improvement of health, or the quality of life. A large number of studies show that having hope is very important for those who are ill. Hope makes ill people feel better, improves their mood, strengthens their motivation to undergo treatment and may even increase the chance that treatments are successful (Snyder, Irving, and Anderson, 1991; Schrank, Stanghellini, and Slade, 2008). 11 Although they are aware of the risk that patients may acquire false hope or persist in their false hope, doctors fear that without the belief in a possibly effective treatment patients may fall into despair. They are not aware of the distinction between disappointment and despair or hopelessness. This mistake is also made by authoritative psychologists. "We hope because we must despair without hope," says Richard Lazarus (1999, 674). Immediately thereafter he says, "As such, the capacity to hope is a vital coping resource. The coping process is, as it were, built into hope as an emotion" (Lazarus, 1999, 674). The assumption, that when a particular hope does not become realized a gap is created that is automatically filled by despair, is not correct. Despair or hopelessness is, according to Mathew Ratcliffe, not the loss of a *particular* hope, but of the *ability* to hope. Ratcliffe distinguishes between "intentional hope"—hope for *p*—and "pre-intentional hope." The latter is a more fundamental attitude of hopefulness. Loss of the hope for *p* does not imply the loss of the fundamental attitude of hopefulness (Ratcliffe, 2013, 600). A sick person who hoped that the first treatment would be successful may lose hope for success of this particular treatment without losing the hope that an effective treatment will be found.

It used to be common for physicians not to give a patient complete information or even to withhold the truth when they thought that he or she could not cope with the whole truth. Currently, doctors tip the balance sometimes to the other side: telling patients everything. In his book *The Anatomy of Hope*, the oncologist-hematologist Jerome Groopman (2004) tells that he first learned from his mentor not to tell the whole truth to patients. After seeing how angry patients and their families can be when they realize that they are lied to, he became a follower of "the ideology of the right to know" and told his patients everything about their illness and their prognosis (Groopman, 2005, 43). Only later did he come to realize how important hope is: Doctors should not only tell their patients the truth but also give them hope. They must know how to find the middle ground between "hope" and "truth" (Groopman, 2005, 57).

To what extent are physicians responsible for their patients' false hope? False hope can arise because doctors do not, or do not completely, inform patients about the treatment's chance of success or about the quality of life after treatment.<sup>12</sup> If a doctor does this unintentionally, his omission is still a form of culpable negligence. Because of his negligence, the doctor is responsible for instilling false hope. When a doctor informs a patient incorrectly or incompletely because he is afraid that the patient cannot bear the truth, his behavior is paternalistic. "Lying at the bedside" is prima facie morally wrong because it is contrary to the principles of respect for autonomy and veracity.<sup>13</sup> Prima facie means that there is room for exceptions, provided that they are justified. Let us take a look at a possible exception.

Suppose that a mentally unstable patient with lung cancer responds very well to chemotherapy. The tumor remission is already more than 50%. The patient regains hope and thinks that it is possible that he will get a few extra years. The doctor then finds that the tumor has spread to other parts of the body but, knowing how important and beneficial having hope is, she is hesitant to tell him that because she is convinced that he will lose all hope, fall into despair, and may want to stop the chemotherapy. Not telling the truth may perhaps mean that the patient only starts preparing for his death, when the spreading of the tumor becomes undeniable and death is imminent. I do not think that an exception to the principles of respect for autonomy and

veracity is justified in this case, but a final judgement requires knowledge of the relevant facts of the case. As we have seen, loss of hope does not necessarily imply that a patient falls into despair.

#### XII. FALSE HOPE AND EXPERIMENTAL MEDICAL RESEARCH

Most medical literature on false hope deals with false hope of patients participating in experimental medical research, and especially in phase-I trials. Participants in phase-I trials of an entirely new drug are usually patients who no longer respond to standard treatments. After hearing the bad news, such patients often ask their doctor: "Is there nothing that you still can do for me, doctor?" The doctor might respond by saying that the patient possibly fulfils the inclusion criteria of a phase-I study for a new, experimental drug. Being a phase-I study, this study does not focus on the effectiveness of the drug but aims to establish the maximum tolerated dose. The probability that the study participants personally benefit from participating is no more than 1%.

People rarely participate in phase-I studies solely for altruistic reasons. They (also) take part because they think it will benefit them personally usually by extending their life or by improving their quality of life. When is hope for personal benefit false? When patients think that the personal benefits of participating are greater than they actually are and especially when they think the chances of these benefits are greater than they really are. In such cases, patients' hope cannot be justified and is therefore unrealistic. The majority of patients with cancer at an advanced stage who participate in phase-I studies think that the aim is to determine what their therapeutic effects are (Cox, 2002; Daugherty, Ratain and, Grochowski, 1995, Joffe et al., 2001). Two notions are used to capture this misunderstanding: therapeutic misconception and therapeutic misestimation (Pentz et al., 2012). A therapeutic misconception exists when individuals do not understand that the defining purpose of clinical research is to produce generalizable knowledge, not personal benefits (Appelbaum, Roth, and Lidz, 1982; Appelbaum et al., 1987). Therapeutic misestimations are overestimations of either the general or the personal probability of the benefits of a trial.

Therapeutic misconceptions and misestimations are very persistent. Some patients still think that participation in a trial will bring them medical benefit, although their doctor has repeatedly emphasized that medical benefits are not the goal of the treatment and that the chance of "collateral" personal benefit is almost nil. In such cases, the doctor is not responsible for the occurrence of false hope. What should a physician do when he observes the persistency of a patient's false hope? Should he exclude a patient from participating in this study if it shows that his real motive for participation is false hope? If he does, he may take away the patient's last hope. But if

he admits the patient to the study, does he not become complicit in the patient's self-deception? I want to emphasize again that hope should not be regarded as false too soon. If a patient knows, and is aware, that the probability of participating in a study will result in personal medical benefit of only 3%, and he still hopes for benefit, his hope is *realistic*. His hope is also *reasonable* if it serves his personal objectives. Hope is false if a patient persists in an incorrect assessment of the probability that she will benefit from participating in an experimental study, despite her doctor's repeated attempts to correct this assessment. Apparently, the patient does not want to know the truth. In such a case, the doctor should admit her to a study if this is what she really wants.

Physicians may also be indirectly responsible for the occurrence of false hope. If a doctor is personally involved in the study as a researcher, then the information he gives to the patient may become biased. When doctors have an interest in enrolling a sufficient number of subjects in a study, this may influence the way they frame the information about the pros and cons of participating. That does not mean that they are not honest or do violence to the truth. Information is always framed. A salesman who does not give as much attention to the weaknesses of his product as to its strengths can still not be said to cheat the customer. A doctor who is also on the research team is expected to inform potential participants about the risks of side effects and the minimal chances of personal benefit. In addition, he will undoubtedly also mention the benefits of participation: regular visits to the hospital will enable patients to give structure to their life, subjects receive extra attention and the best care, the research is of great importance for science and for future patients. It is not inconceivable that patients will then acquire false hope that is insufficiently based on the facts.

## XIII. CONCLUSION

In the first part of this article, I aimed at clarifying that hope is more than a combination of a desire and an assessment of the probability that the desire is fulfilled which is >0 and <1. Imagination and anticipation are also components of hope. Moreover, hope implies acting where possible and resignation when acting is no longer an option. In the second part, I showed that hope is false if it cannot be justified epistemically. There is, I argued, an intimate relation between false hope and ignorance. Hope is false, if it is based on ignorance of the correct assessment of the probability that a desire is fulfilled or on ignorance with regard to the desirability of the object of desire. Hope is justified—realistic—when the hoping person knows and accepts experts' judgement about the probability of hope fulfillment. However, I argued, what matters for evaluating a person's hope is not only whether it is realistic, but also whether it is reasonable in light of the aim and goals

for which the person strives in (the remainder of) his life. Part three was about the question of what is wrong about having or causing false hope. If false hope is a moral problem, having or instilling it should be counteracted. I showed that from a consequentialist perspective, false hope only becomes a moral problem when the negative effects outweigh the positive ones. From a deontological and virtue-ethical point of view, having false hope is morally wrong if the hope is based on culpable ignorance. False hope that does not affect the interests of others is morally permissible but not virtuous. I argued that causing someone to hope falsely is prima facie wrong, and so is not exposing false hope. In the fourth part, I show the relevance of the insights from the previous parts for the debate on false hope in medicine and clinical research. I discussed to what extent physicians are responsible for the false hope of their patients and what they should do when patients cling to their false hope in spite of being properly informed. I showed that a person's hope that an (experimental) treatment may prolong his or her life or improve the quality of his or her life can only be called false when he or she thinks that the chances of personal benefits are greater than those estimated by experts. If he or she does accept their judgement, continuing to hope is realistic. Hope is moreover reasonable if it contributes to realizing what a person strives for in (the remainder of) his life.

#### NOTES

- 1. Examples of twentieth-century thinkers for whom hope was the structural principle of their philosophy or theology are the neo-Marxist philosopher Ernst Bloch (1963), the Protestant theologian Jürgen Moltmann (1964), the phenomenological philosopher Gabriel Marcel (1962), and Catholic philosopher Joseph Pieper (1997). According to Nicholas Smith (2008, 6), "Hope was a matter of 'first philosophy' for them; that is, of significance for solving the basic problems (or deciphering the fundamental enigmas) of metaphysics, philosophical anthropology and philosophy of history. For all the interest these thinkers still have for us, it is hard to see how the 'principle of hope' can be made plausible in quite such an emphatic fashion today."
  - 2. Among them—again—Moltmann, Marcel, and Pieper.
- 3. This is Day's own formulation: "A hopes that p" is true iff "A wishes [i.e., desires] that p, and A thinks that p has some degree of probability, however small" is true (Day, 1969, 89).
- 4. According to Downie there are two criteria that are independently necessary and together sufficient for "hope that": first is that the object of hope must be desired by the hoper . . . The second . . . is that the object of hope falls within a range of physical possibility which includes the improbable but excludes the certain and the merely logically possible (1963, 249).

Downie makes a distinction between "hoping that" and "being hopeful that." For the definition of being hopeful a third criterion is needed: "... a belief that the object of hope is likely to be attained" (1963, 250). That criterion goes beyond the minimum conditions for the probability of hope.

- 5. According to Nicholas Smith, the experience of hope is best described as " . . . an anticipation of something, in the sense of seizing it in advance and projectively uniting ourselves with an objective of which we are uncertain (and perhaps even unconscious)" (2008, 17).
- 6. This is Meirav's formulation: "More generally to think of an external factor, personal or impersonal, as good is to think of it as operating *like* someone who, to a substantial degree, can benefit me, wants to benefit me, and knows how to do so" (2009, 232).
- 7. Snyder is the (co-)author of numerous articles and books on hope. Here, I refer to Snyder (2002).

- 8. In his research Snyder focuses primarily on the differences between people with a lot of hope ("high hope") and little hope ("low hope"). People with a lot of hope have, for example, more positive emotions than those with little hope, and focus on more targets, also with more attention. Hope is, according to Snyder, first of all a thought process; emotions are secondary. The idea of being successful in achieving one's goals evokes positive emotions whereas the idea of not attaining one's goals evokes negative emotions. The probability of achieving goals hardly plays a role in the "hope theory." Snyder initially thought hope was only relevant when pursuing goals whose implementation was uncertain and less likely. He later dropped that restriction. The reason was that his conversations with "high hope" people made it clear that when working on easy targets they always came up with additional tasks for themselves, the success of which was uncertain (such as doing something faster or in a more complex way).
  - 9. See Williams (2013) about the actor relativity of probability thresholds.
  - 10. Day does not distinguish between realistic and reasonable hope.
  - 11. See, for a general discussion of the role of hope in health care, Christy Simpson (2004).
  - 12. William Ruddick (1999) offers an excellent discussion on "hope and deception."
- 13. The "principle of veracity" stems from Sissela Bok who formulates strict conditions for justifying a violation of that principle which she calls the "Scheme of Applied Publicity." That scheme consists of critical self-examination and consultation with a group of people representative of the general public (Bok, 1978).

#### REFERENCES

- Appelbaum, P. S., L. H. Roth, and C. W. Lidz. 1982. The therapeutic misconception: informed consent in psychiatric research. *International Journal of Law and Psychiatry* 5(3–4):319–29.
- Appelbaum, P. S., L. H. Roth, C. W. Lidz, P. Benson, and W. Winslade. 1987. False hopes and best data: Consent to research and the therapeutic misconception. *Hasting Center Report* 17(2):20–4.
- Baumeister, R. F. 1989. The optimal margin of illusion. *Journal of Social and Clinical Psychology* 64(2):899–922.
- Bloch, E. 1963. Das Prinzip Hoffnung. Frankfurt am Main, Germany: Suhrkamp.
- Bok, S. 1978. Lying. Moral Choice in Public and Private Life. New York: Pantheon Books.
- Bovens, L. 1999. The value of hope. Philosophy and Phenomenological Research 59(3):667-81.
- Cox, K. 2002. Informed consent and decision-making: Patients' experiences of the process of recruitment to phases I and II anti-cancer drug trials. *Patient Education and Counseling* 46(1):31–8.
- Daugherty, C. K., M. J. Ratain, and E. Grochowski. 1995. Perceptions of cancer patients and their physicians involved in phase I trials. *Journal of Clinical Oncology* 13(9):1062–72.
- Day, J. P. 1969. Hope. American Philosophical Quarterly 6(2):89-102.
- ——. 1991. *Hope: A Philosophical Inquiry*. Helsinki: Philosophical Society of Finland.
- Downie, R. S. 1963. Hope. Philosophy and Phenomenological Research 24(2):248-51.
- Groopman, J. 2004. *The Anatomy of Hope. How People Prevail in the Face of Illness.* New York: Random House Trade Paperbacks.
- Hume, D. 1896. *A Treatise of Human Nature*. Edited by L. A. Selby-Bigge. Oxford, United Kingdom: Clarendon Press.
- Joffe, S., E. F. Cook, P. D. Cleary, J. W. Clark, and J. Weeks. 2001. Quality of informed consent in cancer clinical trials: A cross-sectional survey. *Lancet* 358(9295):1772–7.
- Lazarus, R. S. 1999. Hope: An emotion and a vital coping resource against despair. *Social Research* 66(2):653–78.
- Levy, N. 2004. Self-deception and moral responsibility. Ratio 17(3):294-311.

- Marcel, G. 1962. *Homo Viator: Introduction to a Metaphysic of Hope*. Trans. E. Crawford. New York: Harper Torchbooks.
- Martin, M. W. 1986. Self-Deception and Morality. Lawrence: University Press of Kansas.
- McGeer, V. 2004. The art of good hope. *The Annals of the American Academy of Political and Social Science* 592(1):100–27.
- Meirav, A. 2009. The nature of hope. Ratio 22(2):216-33.
- Mele, A. R. 2001. Self-Deception Unmasked. Princeton, NJ: Princeton University Press.
- Moltmann, J. 1964. Theologie der Hoffnung. München, Germany: Chr. Kaiser.
- Pentz, R. D., M. White, R. D. Harvey, Z. L. Farmer, Y. Liu, C. Lewis, O. Dashevskaya, T. Owonikoko, and F. R. Khuri. 2012. Therapeutic misconception, misestimation and optimism in subjects enrolled in phase I trials. *Cancer* 118(18):4571–8.
- Pettit, P. 2004. Hope and its place in mind. *The Annals of the American Academy of Political and Social Science* 592(1):152–65.
- Pieper, J. 1997. Über die Hoffnung. München, Germany: Kösel.
- Polivy, J. 2001. The false hope syndrome: Unrealistic expectations of self-change. *International Journal of Obesity* 25(1):580–4.
- Rand, K. L., and J. S. Cheavens. 2009. Hope theory. In *Oxford Handbook of Positive Psychology*, eds. S. L. Lopez and C. R. Snyder, 323–33. New York: Oxford University Press.
- Ratcliffe, M. 2013. What is it to lose hope? *Phenomenology and the Cognitive Sciences* 12(4):597–614.
- Ruddick, W. 1999. Hope and deception. *Bioethics* 13(3-4):343-57.
- Schrank, B., G. Stanghellini, and M. Slade. 2008. Hope in psychiatry. A review of the literature. *Acta Psychiatrica Scandinavica* 118(6):421–33
- Simpson, C. 2004. When hope makes us vulnerable. A discussion of patient-healthcare provider interactions in the context of hope. *Bioethics* 18(5):428–47.
- Smith, N. 2008. Analysing hope. *Critical Horizons: A Journal of Philosophy and Social Theory* 9(1):5–23.
- Snyder, C. R. 2002. Hope theory. Rainbows in the mind. Psychological Inquiry 13(4):249-75.
- Snyder, C. R., L. M. Irving, and J. R. Anderson. 1991. Hope and health. In *Handbook of Social and Clinical Psychology: The Health Perspective*, eds. C. R. Snyder and D. R. Forsyth, 285–305. New York: Pergamon Press.
- Snyder, C. R., K. L. Rand, E. A. King, D. B. Feldman, and J. T. Woodward. 2002. False hope. *Journal of Clinical Psychology* 58(9):1003–22.
- Spinoza, B. 1985. *Ethics. The Collected Writings of Spinoza*, vol. 1. Trans. E. Curley. Princeton: Princeton University Press.
- Stengers, I. 2002. Interview. In *Hope: New Philosophies for Social Change*, ed. M. Zournai, 244–274. Annandale, Australia: Pluto Press.
- Waterworth, J. 2004. A Philosophical Analysis of Hope. Basingstoke: Palgrave Macmillan.
- Williams, B. 2013. The agent-relative probability threshold of hope. Ratio 26(2):179–95.