

# **Conscious Action:**

## **The Power of Mental Preparation and Rehearsal**

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Name:	Marilyn Agliotti
Number:	3359956
University:	Utrecht
Faculty:	Humanities
Department:	Philosophy
Date:	19 August 2013
Supervisor/First Assessor:	Joel Anderson
Second Assessor:	Bart Kamphorst

## 1. Introduction – Conscious control of actions

If it's your task to start reading this thesis, what are the chances that you may not start reading at the time you intended because something else pops up that you would rather do? I predict that there is a chance that you'll do that something else. Why this prediction? Well people are known to put things off i.e. we procrastinate. Why do we sometimes procrastinate when we know that delaying the completion of a task doesn't really help us in the long run? Similarly you are preparing for a marathon in six months time and have set a goal to run thirty kilometers tomorrow as part of your preparation. However your friends convince you to join them at a nightclub after dinner. The result of your night out is that you are no longer able to run the thirty kilometers because you got home late and are too tired to train. Why were you not able to stick to your training schedule? Why did you give in to peer pressure, which has left you with a feeling of regret? The example of procrastination and giving in to social pressure are examples of everyday situations that humans succumb to. What they come down to are instances where we are unable to resist temptations. Based on my experiences as an Olympic athlete and my philosophical interests towards the subject of conscious action, this thesis will argue in favor of the possibility of influencing one's actions through conscious, concerted effort that will enable one to resist temptations such as those mentioned above.

One of the topics that I will be focusing on for this thesis is the topic concerning a person's ability to control his or her conscious thoughts so as to produce a corresponding action. There are divided thoughts and opinions about the effectiveness that the conscious mind has on behavior. The goal of this thesis is to show that there are different conscious activities that are effective in producing corresponding action. I will present distinctive effective conscious activities in the form of mental preparation (goal intentions) and mental rehearsal (visualization).

The key question is whether or not we can consciously control our actions? One solution towards procrastination, as advocated by Joseph Heath & Joel Anderson in their article - Procrastination and the Extended Will, is that one way of preventing procrastination would be to find a way to consciously resist temptations by making use of externally directed strategies. "By structuring one's environment effectively, one can reduce the distractions and temptations behind much procrastination."<sup>1</sup> Heath and Anderson argue that there is an "entire structure of cognitive and volitional scaffolding,"<sup>2</sup> in a person's environment, which can provide the conscious control needed to overcome procrastination. Another, somewhat fatalistic response for resisting temptations such as procrastination, is Daniel Wegner's view concerning conscious control of action. He and others are said to have provided scientific or experimental evidence that consciousness does not cause behavior. This would mean that there would be no point in trying to consciously do anything to resist temptations. Wegner, in his book *The Illusion of Conscious Will* (2002) claims that: "...conscious will is an illusion. It is an illusion in the sense that the experience of consciously willing an action is not a direct indication that the conscious thought has caused the action."<sup>3</sup> In other words no action is conscious, the exact claim in his book being: "The position of conscious will in the time line suggests perhaps that the experience of will is a

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<sup>1</sup> Joseph Heath and Joel Anderson, "Procrastination and the Extended Will," in *The Thief of Time*, ed.

<sup>2</sup> Joseph Heath and Joel Anderson, "Procrastination and the Extended Will." 244-245.

<sup>3</sup> Daniel Wegner, *The Illusion of Conscious Will* (MIT press, 2002), 1-2.

link in a causal chain leading to action, but in fact it might not even be that. It might be a loose end – one of those things, like the action, that is caused by prior brain and mental events.”<sup>4</sup> Wegner makes this claim based on the results of the famous consciousness experiments by Benjamin Libet.<sup>5</sup> The result of Wegner’s claims and Libet’s findings is that if their findings are true, then we can no longer be sure whether or not we are consciously controlling our actions.

Now although I agree with Heath and Anderson that by using an external, environmental strategy one can become better in consciously controlling one’s actions. I do however believe that conscious control of one’s action doesn’t have to be limited to an external strategy only. And as far as Wegner is concerned, I disagree with him that no action is conscious. As I briefly mentioned in the second paragraph, my goal is to show that we are able to consciously control our actions. This is also a general impression that I have. The things I decide to do on a day-to-day basis are examples that support this intuitive claim. Things like deciding to do grocery shopping, or deciding to do the ironing later in the day. The consciousness involved in these mundane activities is purely connected to having to plan and execute daily tasks that sometimes cannot be avoided. However, my point of criticism towards Wegner is not only based on intuition. I will present forms of conscious action that are based on the effectiveness of conscious preparation and on the effectiveness and power of mental rehearsal. I will argue that if a person undertakes the necessary conscious steps prior to an intentional action, in the form of goal intentions and visualization i.e. mental preparation and mental rehearsal, then the likelihood that that person acts in accordance to his or her intentions increases. This would then show that there are conscious activities that cause corresponding actions. In this way I’m also proposing an internal conscious strategy that can be used to resist temptations such as procrastination or peer pressures.

The structure of this thesis will be as follows: In the second section – Implementation Intentions and Strong Resolutions, I present parallel cases of argumentation against Wegner as these withhold strategies that are similar to mine. In the third section – Goal Intentions and Visualization, I present my own argumentation against Wegner and explain how mental preparation and mental rehearsal are effective in producing corresponding actions. In section four – Limitations and Objections, I discuss some possible problems that my forms of conscious action could encounter. In the final section – Conclusion and Implications, I briefly review the arguments presented in this thesis and I discuss the implications of my forms of conscious action.

## **2. Implementation Intentions and Strong Resolutions**

In arguing primarily against Wegner, I will take an approach similar to that of Alfred Mele in his book *Effective Intentions The Power of Conscious Will* and that of Sarah Stroud in her article *Is Procrastination Weakness of Will?* In this section I present a brief outline of the strategy used by Mele and Stroud, as their strategies are analogous to that of mine.

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<sup>4</sup> Daniel Wegner, *The Illusion of Conscious Will*. 55.

<sup>5</sup> Benjamin Libet, “Do We Have Free Will?” In the *Journal of Consciousness Studies* 6 (Imprint Academic, 1999), 47-57.

In *Effective Intentions* Alfred Mele makes a number of claims against Wegner that show that conscious intentions do have a causal relation in an intended action thereby proving that some actions are indicative of consciousness. In chapter seven of his book, Mele handles the consciousness involved in distal intentions i.e. intentions for the non-immediate future. The actual importance of the notion of distal intentions is that there are certain ways as to how we think about future actions. How we think about future actions will determine the effect that these thought processes have on our action. Mele's precise assertion with regards to distal intentions falls under the concept of implementation intentions. What these implementation intentions entail is that when someone is thinking about how to achieve some future intended action, that person will operationalize the steps needed to achieve the intended action. The implementation intentions are made operational by consciously expressing the intentions. Mele borrows Peter Gollwitzer's conception of implementation intentions as intentions that: "are subordinate to goal intentions and specify the when, where and how of responses leading to goal attainment. ... In forming an implementation intention, the person commits himself or herself to respond to a certain situation in a certain manner."<sup>6</sup> What Gollwitzer proved in a number of experiments where implementation intentions were put into practice, is that the likelihood that the goal intentions would be achieved, became considerable.

Mele uses the experiments of implementation intentions to show the causal relevance that they have in corresponding actions. He argues that people on a daily basis and not only in experiments make conscious implementation decisions. He says that: "we do so when we plan complicated trips, parties, conferences, and the like."<sup>7</sup> He goes further on by asserting that: "Regarding studies of implementation intentions, the bottom line is that if subjects sometimes make conscious implementation decisions, we have good reason to believe that the fact that they are *conscious* decisions is causally relevant to their corresponding overt actions."<sup>8</sup> The reason that these conscious decisions become causally relevant to corresponding overt actions is because the conscious decisions aren't just left hanging in the cloud where they originate i.e. one's mind, instead the conscious decisions take on a new form – they take on the form of intentions and become workable items. As Mele explains: "The instructions in the experiments at issue certainly seem to increase the probability that subjects will have distal implementation intentions – in particular, conscious ones that are, on the whole, remarkably effective."<sup>9</sup> Distal implementation intentions become effective because, according to Mele: "The conscious formation or acquisition of distal implementation intentions promotes conscious memory, at appropriate times, of agents' intentions to perform the pertinent actions at specific places and times, which increases the probability of appropriate intentional actions."<sup>10</sup>

At this stage it's clear what Mele's proof of conscious action is; the success rate of executing implementation intentions i.e. intentions consciously expressed and the reporting thereof, proves that some causes of action are conscious. Even though Mele's work seems convincing enough to counter Wegner's claim, it would be good to look for more arguments to strengthen the case against Wegner. I recognize the benefits of making conclusions based on experiments as Mele

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<sup>6</sup> Alfred Mele, *Effective Intentions, The Power of Conscious Will* (Oxford University Press, 2009), 135.

<sup>7</sup> Alfred Mele, *Effective Intentions*, 142.

<sup>8</sup> Alfred Mele, *Effective Intentions*, 142.

<sup>9</sup> Alfred Mele, *Effective Intentions*, 143.

<sup>10</sup> Alfred Mele, *Effective Intentions*, 143.

has done, because one is able to define the framework of an experiment and one is able to measure and quantify results. However, I'm also interested in arguments that can tell me more about the role that a person, in ordinary circumstances, may have in being able to produce a form of conscious action. For this reason I move on to the claims made by Sarah Stroud in her article - Is Procrastination Weakness of Will? Stroud provides another proof of conscious action that could be used as a claim against Wegner.

Besides initially wanting to know what kind of a rational failing procrastination is: "Procrastination ... seems intimately bound up with issues of time and with an important challenge that faces us as rational agents,"<sup>11</sup> Stroud is also not satisfied if we make a claim that all that procrastination entails is putting things off. There are certain things that we don't do now, at this exact moment, but that does not mean that those things have been put off. Stroud uses an upcoming vacation as an example. According to her, there has to be some further factor that makes something an instance of procrastination. This further factor is described as being a choice or decision that one makes to do something later rather than now. Stroud says: "If this suggestion about the conceptual analysis of 'putting off' is correct, then putting off involves something like *making a decision* or *forming an intention* to do the thing later."<sup>12</sup> By making a decision or forming an intention Stroud correctly notes that these concern future-directed mental events. We form these future-directed intentions because people like to plan and coordinate activities with others. However procrastination means letting others and ourselves down, because we have failed to make the necessary preparations to overcome situations or temptations that prevent future-directed intentions from taking place. What therefore needs to be done is that we have to prepare our future-directed intentions sufficiently or precisely so that they don't have a chance of failing. David Allen made similar claims concerning methods to improve time and task management. He claimed that if we don't specify how to start a new task well enough, and if temptations or distractions come along the way, then problems could occur. Francis Heylighen and Clément Vidal explain: "new information typically requires reconsideration of priorities, objectives and resources. When priorities are inconsistent, methods based on optimization or detailed planning become ineffective. ... David Allen has proposed an alternative method: 'Getting Things Done' ... In GTD, the focus has changed from establishing priorities to meticulously keeping track of opportunities and commitments for action."<sup>13</sup>

The making of sufficient and precise plans is a form of conscious intention formation. The question remains, do the conscious intention formations have a causal role in the proceeding intended action? If it does then we once again have proof that how we think about our action can have a causal influence on what we do. There are two ways to recognize the causal relation in Stroud's case. The first one being that planning ahead entails practicing techniques of self-management. And self-management means thinking about doing things and executing those thoughts to structure our lives. It seems reasonable that we do this. One could argue that the fact that we do something does not mean that it is reasonable to do that something. In reaction to this I

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<sup>11</sup> Sarah Stroud, "Is Procrastination Weakness of Will?" In *The Thief of Time*, ed. Chrisoula Andreou and Mark D. White (New York: Oxford University Press, 2010), 58.

<sup>12</sup> Sarah Stroud, "Is Procrastination Weakness of Will?" 53.

<sup>13</sup> Francis Heylighen and Clément Vidal, "Getting Things Done: The Science behind Stress-Free Productivity," in *Long Range Planning: International Journal of Strategic Management* 41 (Elsevier, December 2008), 601.

would like to claim that as far as planning and self-management is concerned, these are reasonable activities because it's what we as rational agents do, day in day out. As Stroud explains: "There are, in short, significant benefits to planning, as opposed to making every decision only when the time comes. If we fail to act on our future directed intentions, however, this defeats much of the point of forming intentions and plans: that is why the abandonment of prior intentions may be grounds for rational criticism."<sup>14</sup>

The second factor that makes Stroud's conscious intentions cause corresponding action has to do with making intentions in the form of strong resolutions. What these resolution intentions entail is what Stroud refers to as defeating anticipated contrary inclinations. Defeating anticipated contrary inclinations is a concept introduced by Richard Holton in his book *Willing, Wanting, Waiting*. Holton describes it as: "Intentions formed by the agent with the very role of defeating any contrary inclinations that might emerge."<sup>15</sup> In this case a person specifically aims to fortify oneself against some or other expected difficulty. Stroud gives the following example:

One reason to form a plan now to run tomorrow evening is that if I simply leave it open until tomorrow evening whether I will run tomorrow evening, I know I may well end up not running. It is predictable that I will feel tired after a long day of work on my procrastination paper, and I may well at that time just prefer to relax with a glass of my favorite beverage. But if I now make a commitment to running tomorrow evening, by forming an intention or adopting a plan to do so, that plan may help get me into my running shoes when the time comes. So I may now form such an intention precisely in hopes of defeating the contrary inclinations I anticipate.<sup>16</sup>

In this way, a person not only makes future-directed plans or intentions but also deliberately appeals to his or her motivation to overcome foreseeable difficult situations.

This is the exact point where Stroud's strong resolutions have the most impact. By recognizing situations that we know will be difficult for us we take on a certain responsibility towards preparing properly or sufficiently for those difficult situations. If we don't take on that responsibility then we expose negligence towards adequate preparation. Can we tolerate this negligence? The answer is no because this would mean that we tolerate poor preparation. My sporting experiences regarding preparation completely support the claim that Stroud makes. There is no point in preparing for any future action if one does not prepare adequately. So a person can either be responsible and prepare properly or be negligent in preparation. And if we are responsible in our preparations then the likelihood that the proceeding action will occur increases considerably. Here too, the specificity of resolution intentions distinguishes them from anemic intentions. Making strong resolutions is a conscious activity that influences the likelihood that we will resist temptations such as procrastination. There are enough examples in everyday life where people make resolutions and do in fact act in correspondence to those resolutions (take for instance the number of people who make resolutions to give up smoking and proceed to do this).

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<sup>14</sup> Sarah Stroud, "Is Procrastination Weakness of Will?" 61.

<sup>15</sup> Richard Holton, *Willing, Wanting, Waiting* (New York: Oxford University Press, 2009), 119.

<sup>16</sup> Sarah Stroud, "Is Procrastination Weakness of Will?" 61.

I can now present the central claim of my thesis that will be explained in the next section. Implementation intentions and strong resolutions are already examples of concepts that fall under the category of conscious action. I intend to introduce two more concepts to this category. My central claim is that conscious mental preparation and mental rehearsal for future actions has a beneficial effect of increasing the likelihood that one will actually perform one's intended actions.

### **3. Goal Intentions and Visualization: Internal strategies for conscious control of actions**

In this section I will be presenting my argumentation against Wegner. This includes presenting an internal strategy of executing conscious activities that will have a beneficial and effective influence on one's actions. The internal strategies being an individual's ability to mentally prepare and mentally rehearse for a future action. It is my intention to build on the parallel cases developed by Mele and Stroud. There are two aspects in their approaches that I will use in my argumentation. The first aspect shows that mental preparation (goal intentions) and mental rehearsal (visualization) are conscious activities. The second aspect shows that mental preparation and mental rehearsal have a causal relation towards corresponding action – the key point being that these conscious activities not only positively influence the things that people do, but also that by mentally preparing and mentally rehearsing one is likely to act in accordance to those goal intentions and visualized scenarios. I will focus on consciously exercising or formulating intentions and reporting on them. Another area of focus being the mental activity involved in making resolutions, such as the activity of recognizing, calculating and deciding how to make effective plans and strong resolutions, and how these can be used to address one's motivation to do an intended action.

I start by briefly explaining how my experiences in sport have led to interests concerning conscious action. Besides being a competitive physical activity that is governed by rules, sport has become a playground where prestige and excellence are strived for, together with overcoming one's personal challenges. In order to prepare, face and overcome those challenges one takes the appropriate physical and mental steps to succeed. As a former Olympic athlete I have experienced many years of training, preparation and competition. Even though much of the time was spent on physical preparation and training, probably just as much time was spent on mental preparation and training. Even at an amateur or recreational level athletes are doing some or other mental preparation; it is one of the essential characteristics of participating in a sport. The mental aspects that athletes generally deal with can be divided into two categories namely, subconscious and conscious aspects. Subconscious aspects are important to point out because the subconscious part of the brain has two roles in my argumentation.

Because practicing sport means doing the same thing over a period of time, one becomes engaged in routine activities. The subconscious aspects mentioned above, are a result of routine thought processes and routine training actions that take place after months or years of doing the same things day in and day out. This is also referred to as automaticity. There is a great deal of experimental evidence showing that automaticity improves performance. To give an example, Aarts and Dijksterhuis conclude in their article - Habits as Knowledge Structures: Automaticity in Goal-Directed Behavior, that: "The more frequently one engages in a certain goal-directed behavior in similar situations, the stronger the association becomes and, hence, the easier it is to

automatically elicit the behavior by activating the goal.”<sup>17</sup> This form of subconscious activity can also be compared to Mele’s proximal intentions, which are intentions about “what to do now.”<sup>18</sup> An example of such an intention is the act of unlocking a door or making a phone call. Although we are aware of the action that takes place, it is something that happens without really having to think about what one does. An example of such a subconscious activity related to sport could be the filling of a water bottle or the tying of a shoelace or moving into a position to receive a pass. These actions initially require mental preparation but because they have been done over and over again, they become automatic. As I already pointed out in the first section, I am focusing on action that originates from future directed intentions like distal intentions.

Now as far as the consciousness of mental preparation in the form of goal intentions is concerned, one requirement thereof is that there is enough room to exercise conscious control. It is unclear as to how much room proximal intentions provide to exercise conscious control. However, what is certain is that distal intentions do provide the room needed to exercise conscious control. Why does mental preparation need room for conscious control? The reason is simply that mental preparation requires robust conscious activity because it needs to take into account any factors that may influence the path that the mental preparation needs to follow. Whether goal intentions are set by an athlete, or by business professionals or anybody for that matter, they are continuously adapted according to the actualities of daily events. These adaptations will influence the mental preparation i.e. goal intentions that need to be set. If a certain team for example has a goal intention to win an Olympic medal and if at some stage during preparation the team experiences unforeseen setbacks then the goal intention will be adjusted accordingly. There are many factors that can influence goal intentions and thus the mental preparation related to them. All these factors are however an indication that mental preparation in the form of goal intentions requires room for conscious control. Together with this, mental preparation cannot become a routine activity because it is continuously susceptible to change and adaption.

But one might still want to know what makes mental preparation conscious. Well, as already mentioned, mental preparation requires robust thought processes. These thought processes include analysis, decision making, calculating, awareness and what we have already seen in Stroud’s work, the ability to recognize unwanted future situations (resolution intentions) and plan ahead. Because mental preparation needs robust thinking work and is susceptible to unexpected change and adaption we can conclude that it occurs consciously. However, this robust thinking and planning ahead also has to be effective. Stroud emphasizes the importance of robust thought processes by highlighting what can go wrong if we don’t make effective plans. She writes: “For example, we plan badly when we adopt an instrumentally ineffective plan whose implementation will likely frustrate rather than achieve its aim. We plan badly when we adopt an overly demanding, unrealistic plan. And, in a case of special interest in the present context, we plan badly when we adopt only a vague or undemanding plan when a stronger, more specific plan is required.”<sup>19</sup>

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<sup>17</sup> Henk Aarts and Ap Dijksterhuis, “Habits as Knowledge Structures: Automaticity in Goal-Directed Behavior,” in the *Journal of Personality and Social Psychology* 78 (American Psychological Association, 2000), 60.

<sup>18</sup> Alfred Mele, *Effective Intentions*, 10.

<sup>19</sup> Sarah Stroud, “Is Procrastination Weakness of Will?” 63.



Can the same be said about the consciousness involved when mentally rehearsing a future intended action? Visualization is known to be a successful technique or mental training that can have a positive effect on corresponding actions. As Porter and Foster explain in the book *Visual Athletics: Visualization for Peak Sports Performance*:

The reason visual imagery works lies in the fact that when you imagine yourself perform to perfection and doing precisely what you want, you are in turn physiologically creating neural patterns in your brain, just as if you had physical performed the action. These patterns are similar to small tracks engraved in the brain cells that can ultimately enable an athlete to perform physical feats by simply mentally practicing the move. Hence, mental imagery is intended to train our minds and create the neural patterns in our brain to teach our muscles to do exactly what we want them to do.<sup>20</sup>

There is a lot of research that has revealed that mental practices are just as effective as true physical practices. See the footnote reference for one example of such a research article.<sup>21</sup> Now in the same way that Stroud's resolution intentions were proven to be conscious activities (we showed that they involve thought processes such as analysis, recognition and calculation), the practice of visualization also necessarily involves conscious thought processes. The difference between resolution intentions and visualization is that visualization provides the playground where resolution intentions can be tested and perfected. A person creates all sorts of scenarios or screenplays in one's mind of possible upcoming actions that a person may need to use to achieve goal intentions that have been set or to overcome difficult or tempting situations. Once these scenarios are created, a person can play with the eventual outcomes of these scenarios, and in most cases one visualizes about the most advantageous outcome. This visualization process creates a film of intended action in a person's mind. Because of the repetition aspect connected to visualization, when one of the visualized scenarios does actually occur then a person is not only prepared for the action needed, if often happens that instinctively the appropriate action is executed.

One could argue that visualization is mental rehearsal that is characterized by repetitive thought processes. This would be a problem because the repetitiveness would make visualization a case of subconscious mental activity, which as previously mentioned is not the type of mental activity that I'm arguing in favor of. Instead, although it's true that it may become a routine to visualize about scenarios and that there is a fair amount of content repetition involved in the visualization process, the actual mental rehearsal that takes place is completely conscious. This being so because firstly, one has to consciously control the thoughts needed for the scenarios that one visualizes about. A person who visualizes becomes a producer of his or her required actions. And just as a scene in a film gets cut and filmed repeatedly until the intended effect is achieved, in the same way someone that visualizes puts his or her thoughts to work until an adequate intended action is created. Secondly, one has to consciously initialize the practice of visualization; it is not something that happens subconsciously. So in the same way that Stroud's resolution intentions are shown to be conscious because of the conscious thought processes needed, I am arguing that

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<sup>20</sup> Porter, K., Foster, J. *Visual Athletics: Visualization for Peak Sports Performance* (Dubuque, Iowa: 1990), 17.

<sup>21</sup> Ranganathan, VK et al, "From mental power to muscle power – gaining strength by using the mind," in *Neuropsychologia* 42 (Elsevier, 2004), 944-956.

there are conscious thought processes involved when mentally rehearsing or preparing for an intended action. The important point here is once again that there has to be room for conscious control but also there is an element of responsibility that has to be taken care of in the mental rehearsal of an action. A person can be held responsible for failing not to perform an intended action or failing to perform an intended action as well as one would like to.

I will now explain the causal role of mental preparation (goal intentions) and mental rehearsal (visualization) in corresponding actions. Formulating goal intentions requires the actualization of dreams or ambitions into tangible, achievable steps that will result in achieving the end goal that has been set. This is a mental preparation process that has elements of strong resolutions and implementation intentions. It is one thing being able to name the goal that one intends to achieve, however the framework needed to fulfill this goal requires a lot of hard work and analyzing potential difficulties. More often than not, besides naming the goal to be achieved at the end of the journey many sub-goal intentions are formulated along the way. One can say “I want to win a gold medal” but the next question to be answered is how exactly does someone achieve that goal. Many different sub-goals are formulated to make the end goal achievable. As we saw in Mele’s implementation intentions, what made these intentions so successful is that participants in the experiments were asked to write down their intentions but also report on these intentions. Now because the process of formulating goal intentions undergoes almost the same procedure; goals are written down, each sub-goal gets analyzed and changed along the way if needed and feedback is generated concerning goals, the success of formulating goal intentions has also been proven in this way. The strength and advantage of working with goals, in order to produce the required action to achieve those goals, has become a popular strategy for sport teams, individuals and business all over the world. In summary, the reason why formulating goals has the effect of causing corresponding action is because of the specificity inherent to goal intentions. The specificity requires adequate conscious preparation. Being sufficiently prepared turns the goals into workable achievable steps along a journey towards a desired destination and the success of this has been proven on many occasions.

Mental rehearsal has a causal role in corresponding actions because firstly, the repetitive nature of visualizing about the content of one’s intended action has the effect of making the corresponding intended action happen automatically. What this means is that mental rehearsal as explained in previous paragraphs is a conscious activity, however the content of what is being visualized about undergoes so much repetitive conscious thought that this content becomes absorbed into a person’s subconscious. Now because what has been mentally rehearsed has become automatized, when a situation occurs that triggers the visualized content in one’s subconscious, then the corresponding action occurs automatically. The content of mental rehearsal becomes intentions that are the same as intentions of unlocking a door or filling a water bottle i.e. they become proximal intentions that are based on routine actions. The successfulness of acting in correspondence to proximal intentions is proven on a day-to-day basis. How often does unlocking the door or filling a water bottle go wrong? I think we can agree that it’s hardly ever. Mental rehearsal is however, according to me, a more powerful conscious activity than implementation intentions. It is not only useful as an influence to produce corresponding action; it also improves the quality of a performance due to its automaticity. Together with this, it provides a motivation to overcome temptations and possible distractions. How does it do this? To explain this I will use an example of a personal mental rehearsal experience I have had.

One of my hockey tasks during a penalty corner defense was to defend any goal attempts by the opponent, like a goalkeeper would, but then without any protection. Obviously the temptation to step out of the way when a hockey ball was fired towards me was great. However, mental rehearsal in the form of visualization helped me resist this temptation. The mental rehearsal had two aspects: The first aspect was the physical rehearsal of not moving out of the way of the ball, and visualizing the whole action of stopping a goal attempt i.e. getting stick to ball, clearing the ball out of the goal mouth etcetera. The second aspect introduces a phenomenological factor to mental rehearsal. I continuously imagined my task as experiencing the expectations that other people had of me. Not to forget my own expectations. I visualized experiencing the position of importance I was in, I visualized about experiencing my responsibility. Most important of all, I visualized experiencing the reaction of others and my own feeling of triumph when I saved a goal because I had stood my ground. These visualizations gave me the motivation to resist moving out of the way, and it worked. It worked because during the visualization I became conscious of what those experiences felt like. In reality I stood my ground, as I wanted to experience what I had mentally experienced.

Secondly, when we find ourselves in situations that we have already visualized about, we recognize these visualized scenarios and know how to respond to these situations. According to me, this knowledge motivates a person to act accordingly. The causal effect is therefore produced not only because one recognizes the situation, but also because one already knows how to act in that situation. Richard Holton in *Willing, Wanting, Waiting* speaks of a similar addressing of one's motivation. He writes: "Intentions can thus work to preserve the motivational power of earlier desires: a desire can give rise to an intention, and this intention can result in a consequence action even when there are, by that time, contrary desires present."<sup>22</sup> The difference between Holton's view and mine is that Holton refers to a previous desire that motivates, whereas I refer to an existence of previous knowledge as a form of motivation, which can result in a consequence action. How does prior knowledge provide the motivation to act accordingly? Well I'm claiming the same as what Gollwitzer claimed. By already knowing what one has to do, you are no longer faced with the aversive tasks of figuring out what has to be done.

To make this point clear, I would like to refer once again to the work done by David Allen. He made it clear that if we don't specify well enough how to start a task, then any temptations or distractions are going to cause problems. The knowledge gained from mental rehearsal does the job of sufficiently specifying how a certain action needs to be executed. In other words, one has the knowledge needed to recognize where the dangers are in foreseeable temptations. And if you have this knowledge, then you can mentally prepare to overcome the temptations. So we have knowledge of the temptations and also knowledge of the results that can be achieved. Having this knowledge adds extra motivation to do the corresponding action. By addressing a person's motivation in this way the success rate of executing the required action will more than likely increase. In summary, I have argued that the content of visualization has a causal role towards corresponding actions because the origin of these actions is found in our subconscious and these actions occur automatically or effortlessly. I have also argued that visualization addresses an extra motivation to produce the corresponding action because of the phenomenological factor that can be included in mental rehearsal. And I have argued how an extra motivation is addressed if

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<sup>22</sup> Richard Holton, *Willing, Wanting, Waiting*, 119.

one has prior knowledge of how to adequately prepare for possible temptations or distractions.

This section has introduced two more concepts to the category of conscious action namely mental preparation (goal intentions) and mental rehearsal (visualization). When the carrying out of actions based on goal intentions and visualization occurs, these forms of mental preparation and rehearsal withhold aspects of tangible, measurable, achievable and motivational conscious activities. Visualization also creates effortless subconscious automaticity.

#### 4. Limitations and Objections

In this section I will discuss one possible limitation and one possible objection that could be related to conscious mental preparation and rehearsal such as goal intentions and visualization.

Firstly, there are limitations that are related to mental preparation. There are certain epistemic issues of limited self-knowledge that could expose a weakness in my claim. My claim, that robust thinking steps are needed for goal intentions, comes into direct confrontation with issues concerning the limitations of self-knowledge. Self-knowledge: “commonly refers to knowledge of one’s particular mental states, including one’s beliefs, desires and sensations.”<sup>23</sup> The limitations of self-knowledge can take on two forms. Firstly, the fundamental question that needs to be asked is ‘How well do people know themselves?’ Our self-knowledge is fundamentally limited in this way because we simply cannot tell what the limits of our conscious or subconscious states are. Secondly, as far as the conditions of our mental states are concerned, people are known to have motivational and non-motivational limits to self-knowledge. “Perhaps the most common reason cited for failures of self-knowledge is that people are motivated to keep some thoughts and feelings out of consciousness, usually because they are unpleasant or anxiety provoking.”<sup>24</sup> Together with this a non-motivational limit being: “that much of the mind is inaccessible to conscious awareness.”<sup>25</sup>

The goal intention requirement of completing robust thinking steps to produce conscious action, as explained in the previous section, calls for an individual to consciously address unpleasant or difficult situations. This makes the limitation of self-knowledge relevant because people are in fact motivated to expel unpleasant or difficult thoughts from their consciousness, as mentioned in the previous paragraph. An individual also has to have adequate self-knowledge. This is relevant because if somebody wants to form an effective goal intention, that person first has to know if he or she is in fact capable to achieve the goal that has been set. But how does an individual know if he or she has adequate self-knowledge? “Self-knowledge is said to be quite limited, though repression is usually so successful that people do not *know* that it is limited.”<sup>26</sup> My concerns are thus that mental preparation can be limited because people don’t consciously want to face

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<sup>23</sup> Brie Gertler, "Self-Knowledge", *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2011/entries/self-knowledge/> (access date 03 July 2013).

<sup>24</sup> Timothy D. Wilson, Dunn, Elizabeth W. “Self-knowledge: Its Limits, Value, and Potential for Improvement,” in the *Annual Review of Psychology* 55 (Palo Alto: Annual Reviews, February 2004), 17.3.

<sup>25</sup> Timothy D. Wilson, Dunn, Elizabeth W. “Self-knowledge: Its Limits, Value, and Potential for Improvement.” 17.7.

<sup>26</sup> Timothy D. Wilson, Dunn, Elizabeth W. “Self-knowledge: Its Limits, Value, and Potential for Improvement.” 17.3.

unpleasant or difficult situations and there are genuine limits to a person's self-knowledge. The result of this would be that people might formulate goal intentions that are limited by issues pertaining to self-knowledge, which can reduce the effectiveness and quality of mental preparation.

There are two possible solutions to my concerns. One way to overcome expelling unpleasant or difficult thoughts is by visualizing. In the previous section I used a sporting experience to explain how effective visualization can be in overcoming difficult situations or intimidations. Visualization is a means to consciously address unpleasant or provoking thoughts. Making goal intentions on the other hand is a solution to the limits of a person's self-knowledge. Goal intentions are a pronouncement about how to achieve some external reward that answers to one's inner states i.e. one's self-knowledge of one's desires, beliefs and sensations. This line of thought takes the first- person authority view as described by Crispin Wright to a new level: "The authority standardly granted to a subject's own beliefs, or expressed avowals, about his intentional states is a *constitutive principle*."<sup>27</sup> What this means according to Gertler: "In other words, what is special about self- attributions is that each of us is the default authority about her own mental states, in the sense that self-attributions are not - except in extraordinary circumstances - open to challenge by others."<sup>28</sup> I believe that goal intentions are the extraordinary circumstances that Wright is referring to. Goal intentions are self-attributions in extraordinary circumstances that *are* open to challenges by others. This implies that a person's goal intentions can be open to criticism and advice from others. A person then has the freedom to choose to adhere to his or her initial goal intentions or to adjust these intentions based on what someone else's input may be. The openness of goal intentions provides a solution because goal intentions are made according to a person's inner states but also in response to how much knowledge others have of that person.

An objection could be directed towards my claim concerning the automatized content of mental rehearsal. This objection could be founded on the view that automaticity tendencies, although believed to be more effective for corresponding action deliverance, can be impaired by conscious thoughts. In this way conscious thoughts are said to be detrimental to certain cognitive capacities. Wegner, in particular is said to have shown this. In the article: *Do Conscious Thoughts Cause Behavior?* Roy Baumeister et al., gives an example of Wegner's view: "Likewise, it has been popular to assert that creativity is an unconscious process and that the conscious self is an impediment to the creative process."<sup>29</sup> Another example discussed by Baumeister et al., shows that ... 'conscious attention can interfere with automatic processes, to the detriment of successful performance on highly automatized (well-learned) tasks.'<sup>30</sup> Clearly these forms of conscious impediment would undermine the successfulness that I claim can be achieved by mental rehearsal. How could I then be so certain that it is successful?

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<sup>27</sup> Brie Gertler, "Self-Knowledge", URL = <http://plato.stanford.edu/archives/spr2011/entries/self-knowledge/>

<sup>28</sup> Brie Gertler, "Self-Knowledge", URL = <http://plato.stanford.edu/archives/spr2011/entries/self-knowledge/>

<sup>29</sup> Roy F. Baumeister, Masicampo, E.J. Vohs, Kathleen D. "Do Conscious Thoughts Cause Behavior?" In the *Annual Review of Psychology* 62 (Palo Alto: Annual Reviews, January 2011), 342-343.

<sup>30</sup> Baumeister, Masicampo, Vohs, *Do Conscious Thoughts Cause Behavior?* 343.

To answer this question and defend my certainty of that mental rehearsal is successful I can refer to the following. As far as consciousness can reduce the effect of subconscious action content: “laboratory studies by Baumeister et al., (2007b) found creativity to be reduced under cognitive load, whereas conscious goals to be creative enhanced creativity.”<sup>31</sup> What this implies is that, the goal intentions that I advocate can be used together with the process of conscious mental rehearsal, to increase the effect that mental rehearsal has on producing corresponding action even more. By making one’s visualized content into a goal intention, together with the fact that the visualized content has become an automatism in one’s subconscious, the chances that conscious thought will impede subconscious action tendencies will be reduced. As far as the example of conscious attention is concerned, the fact that conscious distraction can impede a subconscious action tendency can in my opinion be nullified. The reason for this is because mental rehearsal prepares a person to act sub-consciously in a situation. A conscious thought won’t interfere with the execution of the action because what happens sub-consciously happens in advance.

## **5. Conclusion and Implications**

The aim of this thesis was to show that there are different conscious activities that are effective in producing corresponding action. I presented these conscious activities as an internal conscious action strategy that not only serves as an argument against Wegner’s claim that no action is conscious, it is also a powerful strategy that I believe can be used to resist temptations or overcome difficult situations.

My claim against Wegner showed that there are forms of conscious mental preparation and conscious mental rehearsal for future actions. These conscious activities are built on the ideas of implementation intentions and strong resolutions as presented by Mele and Stroud respectively. Mental preparation (goal intentions) and mental rehearsal (visualization) are activities that have a beneficial effect of increasing the likelihood that one will actually perform one’s intended actions. There are a number of reasons for this. Goal intentions, like implementation intentions and strong resolutions, are effective for action because they represent mental preparation that requires specificity, sufficient planning, the creation of workable/achievable items and an overall responsibility of properly preparing for future action. If one mentally prepares in this way then the likelihood that the corresponding action takes place increases profoundly. Visualization on the other hand takes mental preparation to a new level. By mentally rehearsing one is also consciously preparing for future action. However, I showed that visualization is a more powerful tool in producing corresponding action because it addresses a human’s subconscious ability of producing effortless automatic action. Together with this, visualization appeals to a phenomenological motivational factor where a person can consciously experience what a future action or situation feels like. This conscious experience will likely motivate a person to act so as to realize that experience. Another motivational factor connected to visualization is that mental rehearsal embeds knowledge of what a person has to do in a future situation in a person’s mind. Having this prior knowledge motivates a person to act accordingly because one already knows what one has to do.

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<sup>31</sup> Baumeister, Masicampo, Vohs, *Do Conscious Thoughts Cause Behavior?* 343.

One specific implication regarding goal intentions has to do with my argument that goal intentions are open to challenges from others. What this implies is that goal intentions are prone to negative or positive criticisms by others. Allowing for external recommendations is what makes goal intentions work effectively. External recommendations add to the precision and quality of goal intentions that are made. A specific implication concerning visualization is that when preparing for difficult situations like having to resist temptation, one cannot tolerate poor preparation. If one doesn't take the responsibility to prepare properly then any corresponding action will in fact be futile because the difficult situation won't be defeated. The general implications of mentally preparing or mentally rehearsing as I claim one could do, are that if someone really wants to get something done at a future time then a significant amount of conscious work is required beforehand. Doing this prior work will determine whether one will be successful in terms of the quality of one's performance but also in being motivated to perform in the first place. People normally get a bit hesitant when faced with the fact that more work is required to achieve a certain result. However the rewards of proceeding according to my strategy are great. This is so because putting in the initial hard work definitely does pay off in the end. I spent just as much time on mental preparation and rehearsal as I did on physical training during my sporting career and I have two Olympic gold medals to prove that it does pay off.

One more final thought. A teacher once told me that I could achieve anything that I put my mind to. If only she knew how true her words were and that these words apply to everybody.

## Bibliography

Aarts, Henk. Dijksterhuis, Ap. "Habits as Knowledge Structures: Automaticity in Goal-Directed Behavior." *Journal of Personality and Social Psychology* Vol.78 No.1 (January 2000), 53-63.

Baumeister, Roy F. Masicampo, E.J. Vohs, Kathleen D. "Do Conscious Thoughts Cause Behavior?" *Annual Review of Psychology* 62 (January 2011), 331-361.

Gertler, Brie. "Self-Knowledge." In *The Stanford Encyclopedia of Philosophy* (Spring 2011 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2011/entries/self-knowledge/> (access date 13 June 2013).

Heath, Joseph. Anderson, Joel. "Procrastination and the Extended Will." *The Thief of Time: Philosophical Essays on Procrastination*, edited by Chrisoula Andreou and Mark D. White, 233-252. New York: Oxford University Press, 2010.

Heylighen, Francis. Vidal, Clément. "Getting Things Done: The Science behind Stress-Free Productivity." *Long Range Planning: International Journal of Strategic Management* 41 (December 2008), 585-605.

Holton, Richard. *Willing, Wanting, Waiting*. New York: Oxford University Press, 2009.

Libet, Benjamin. "Do We Have Free Will?" *Journal of Consciousness Studies* 6 (1999), 47-57.

Mele, Alfred. *Effective Intentions, The Power of Conscious Will*. Oxford University Press, 2009.

Porter, Kay, Judy Foster. *Visual Athletics: Visualization for Peak Sports Performance*. William C Brown Publishers, 1990.

Ranganathan, VK, V.Siemionow, JZ.Liu, V.Sahgal, GH.Yue. "From mental power to muscle power – gaining strength by using the mind." *Neuropsychologia* 42 (2004), 944-956.

Stroud, Sarah. "Is Procrastination Weakness of Will?" *The Thief of Time: Philosophical Essays on Procrastination*, edited by Chrisoula Andreou and Mark D. White, 51-67. New York: Oxford University Press, 2010.

Wegner, Daniel. *The Illusion of Conscious Will*. MIT Press, 2002.

Wilson, Timothy D. Dunn, Elizabeth W. "Self-knowledge: Its Limits, Value, and Potential for Improvement." *Annual Review of Psychology* 55 (February 2004), 17.1-17.26.