Artifacts, Intentions, and Contraceptives: The Problem With Having a Plan B for Plan B

Philip A. Reed

ABSTRACT:

It is commonly proposed that artifacts cannot be understood without reference to human intentions. This fact, I contend, has relevance to the use of artifacts in intentional action. I argue that because artifacts have intentions embedded into them antecedently, when we use artifacts we are sometimes compelled to intend descriptions of our actions that we might, for various reasons, be inclined to believe that we do not intend. I focus this argument to a specific set of artifacts, namely medical devices, before considering an extended application to emergency contraceptive devices. While there is some debate about whether emergency contraception has an abortifacient effect, I argue that if there is an abortifacient effect, then the effect cannot normally be a side effect of one’s action.

KEYWORDS: artifact, intention, function, double effect, emergency contraception

Suppose a thief wants to steal a necklace—not just any necklace, but a necklace that has been soldered together around a woman’s neck and so cannot be removed in the normal ways. To acquire what he wants, the thief beheads the woman. He insists that he in no way intends to kill or even harm the woman but only to have the necklace. From a common sense perspective, the agent intends to kill or harm. But suppose from the agent’s own perspective (and congruent with some philosophical analyses), he understands his action in such a way that any harm to the woman provides no motivating reasons whatsoever for his action and so the killing is not intentional. He does not aim at harming the woman and he insists it is not part of his plan, but rather a side effect, for the killing or harm does not contribute to his end.

The intuition I expect to share with most readers is that the agent has deceived himself in some important way about what he intends as a means. However, the trouble is how to justify this intuition philosophically, for in order to do so it appears that one has to specify precisely what counts as an intended means to an end. Because actions are only available under a description, it is not obvious why the thief would be wrong in saying that his action should not be described as a “killing” but rather as an “altering of the location of the parts of the woman’s body” or something similar. How do we know what descriptions of actions are intended by an agent, especially when it comes to the chosen means to his desired end? And does the agent himself have the final say on what he intends?

In this paper, I focus on one specific instance where this problem arises, namely when an agent uses an artifact as a means, and I argue that because artifacts have intentions embedded into them antecedently, we are sometimes compelled to intend descriptions of our actions that we might, for various reasons, be inclined to believe that we do not intend. When it comes to the use of artifacts, the agent does not get off the hook as easily as our thief hopes to. I focus my argument to a specific set of artifacts, namely medical devices, before considering an extended application to emergency contraceptive devices. While there is some debate about whether emergency contraception has an abortifacient effect, I argue that if there is an abortifacient effect, then the effect cannot normally be a side effect of one’s action.

§1 Artifacts and Intentions

Intention is of course a notoriously difficult notion to grasp in the philosophy of action and ethics. The notion of intention I work with in this paper is meant to be as non-controversial as possible. What an agent intends to do is that which an agent tries or attempts or plans to do. I do not believe that an agent must intend everything he foresees to come about from his action or everything that causally flows from his action. Of the many effects that an action might have, an agent intends the ones that she counts as *reasons* for action. If a man mows his lawn, the noise from his lawnmower may be something he foresees and causes with certainty but usually it is not among his reasons for mowing; he does not therefore intend this effect.[[1]](#footnote-1) He does, however, intend to make his grass shorter when this is part of his objective in the action he chooses.

The above contrast between what agents intend and what agents foresee is pivotal to the principle of double effect. This principle maintains that an action performed for a good end can sometimes be morally permissible even when the action is productive of a bad effect, provided that the bad effect is not intended by the agent but instead only foreseen. As the principle is typically formulated, it requires a set of conditions for application, one of which is that the harmful effect cannot be a means to the good effect. It is this particular condition that I am concerned with in this paper and not double effect itself or ethical evaluation more generally. I am interested in focusing on what agents intend as a means while ignoring other important moral considerations, such as proportionality, negligence, recklessness, and moral responsibility. Some readers will correctly observe that even if the thief in the above example does not intend to kill or harm the woman whose necklace he takes, his action is still not morally permissible, for the end for which he acts is not good (among other reasons). But I want to avoid the comprehensive ethical evaluation of actions in order to get clear on what is happening with intention.

Because of the importance of reasons for action, we know that the agent’s own perspective is essential to understanding what the agent intends. In other words, in order to evaluate intention accurately it is necessary to understand what the agent believes himself to be doing or to reconstruct his own practical reasoning. While an agent’s perspective is necessary, it is not sufficient in my view.[[2]](#footnote-2) Among the reasons for action that the agent utilizes are not only the ultimate ends for which she acts but also the means to these ends. If it is true that we have to intend the means to our end, as many theorists hold and I will assume for purposes of this paper, then the trouble becomes how precisely we specify the means. I contend that specifying the means is not something one can do merely subjectively: it is not up to an agent alone to determine what act descriptions count as a means to her end. Consider again the thief who intends to take the necklace. It would seem he uses a beheading here as his means and it would also seem that to intend to behead a person just is to intend that person’s death; and this is true given certain facts about the world. In other words, there is something about the objective character of the world that can determine what our intentions are (especially when it comes to the means), despite what we might otherwise tell ourselves and despite how we understand our intentions when we act. Thus, an agent cannot omit whatever it is he wants from an accurate or veridical description of his intentional action.[[3]](#footnote-3)

What else is necessary besides an agent’s perspective to obtain a veridical description of his intentional action? Philosophers have put forward various features such as the physical structure of the act, the causal nature of the act, and/or the context of the act (Porter 1996, Flannery 2001). In many cases, an observer’s perspective is necessary in acquiring these other relevant features. However, it is highly controversial to define precisely and persuasively the contribution to intention that these other features make. What I want to say in this paper is that artifacts pose as an exception here. Because of the inherent intentional structure of the artifact itself, there is an objective feature that provides some constraints on what an agent intends when he uses the artifact as a means.

At first glance, it might seem surprising that artifacts can have any bearing on intentions. Artifacts or tools are generally thought to be neutral phenomena. Because we can use them in whatever way we please, they do not seem to provide any normative constraints on what agents intend when they act. But the neutrality interpretation of artifacts can be debunked by a simple, common sense observation: artifacts are designed to do certain things and this design is built into the physical structure of the device.[[4]](#footnote-4) Artifacts in other words have *functions* or purposes for which they are intended to be used. An artifact’s function typically defines an end for which the artifact is intended to be used and a means to achieve that end. The importance of functions to artifacts has provoked a number of philosophers to say that artifacts cannot be understood without reference to human intentions (Hilpinen 1992, Thomasson 2003). In other words, an artifact’s function has human intentionality built into it. The functions of artifacts are different in this respect from the functions thought to be found in biology. This teleological understanding of artifacts is an obvious improvement over a neutral understanding and it goes some way towards showing how using a tool can compel us objectively to intend certain descriptions of our actions.

Philosophers who write on the metaphysics of artifacts are not usually concerned with ethics and theories of action. But to use a tool in the way it is designed just is an action of a certain kind. If we are trying to analyze the intentional structure of an action accurately, why should we think that the functions of artifacts are irrelevant? The relevance can be captured in the following thesis: *if an agent knowingly intends to use an artifact or tool for a purpose other than the tool’s function, and that tool achieves its function in the proper way, then the function (either end or means) is not a side effect of the action whereby the tool is used and so must be part of the agent’s intention*. For example, suppose someone mows the lawn in order to annoy his neighbors, does one intend to make the grass shorter? On some theories of intention, it would seem that the grass getting shorter is not intended but only a side effect (a side effect just is an effect that is not intended), for the agent might reasonably say that the grass being cut was not something that mattered to him and did not something he conceptualized in his deliberations. However, I believe that this understanding of intention cannot be maintained because it overlooks the importance of using the lawn mower as a means and the function of the lawn mower therein. Even if it is true that an agent does not *ultimately* intend to make the grass shorter (let us suppose), the fact is that he uses the lawn mower in such a way that it counts as a chosen means to his end. The means that he chooses contains an intentional structure of the form: to spin a blade to cut the grass. Because the agent knowingly intends to use the lawn mower as a means to his end, he cannot deny that he intends to spin a blade to cut the grass, for that is the very thing the lawn mower is supposed, designed, and intended to do. There is no room for talk of a side effect. When an agent plans to use an artifact in its intended way, the inherent plans of that artifact must be part of his plan. The agent is right to say that the grass being cut is not ultimately what he wants to achieve, but he cannot say that he does not intend to cut the grass.

It might be objected that the intuition I want to capture is that the person is *responsible for* the mown grass, but this still does not mean he intends this effect. I certainly accept the position that an agent who brings about foreseeable side effects is still responsible for those effects. But as I mentioned earlier, I am not interested in responsibility or any other moral considerations except intention. To say that the agent is responsible for the mown grass does not go far enough. The issue lies precisely in using the tool as a means. It is true that the tool can be used for a further intention (to annoy the neighbors), but we nevertheless make the means as part of our plan or count it among our motivating reasons. What philosophers have long known about people, that they have intentions, is also appropriately said of technology. This similarity is not accidental, for it is the people who are responsible for the intentions we find in artifacts. We design our tools to do certain things and sometimes we design them to do certain things in certain ways. When the use of a tool is chosen as a means, it is necessary to consider the inherent structural intention that the artifact carries in order to distinguish what is properly intended from what is a side effect. Just as the ends of someone else become our own when we are complicit in them, so too with the ends of artifacts.

I have stated my thesis in such a way so as to avoid some obvious problems. First, I do not believe the function of artifacts constrains our intentions such that whatever the thing is for is what we have to intend. Tools are frequently used for purposes other than their functions, and to do this obviously does not compel us to intend the function in the alternative use. Suppose the agent does not run his lawn mower over the grass—only turns it on and leaves it idle in the driveway to annoy the neighbors. It is wrong to say on my view that he intends to cut the grass in this scenario, for he does not use the tool in the way it is intended to be used or in the proper way. What I argue is that *if* the tool achieves the function that it is supposed to in the way it is supposed to, then the agent must intend that function. Second, notice that the agent’s perspective is still necessary, i.e. the agent has to use the artifact *knowingly*. What I mean by this is that the agent has to be familiar with the function of the artifact, both its means and end. If an agent believes falsely that the lawn mower is a tool meant to annoy the neighbors, then when he uses this tool he does not intend to cut the grass.

Crucial to my view is that artifacts really do have functions embedded into them. Some may be skeptical of this claim, and argue that even if it were true, there would be no clear way of knowing what the functions of artifacts *are*. But I take it to be a common sense perspective that tools are meant to do certain things and in certain ways. If we ask the plain person what a lawn mower is for, he has no trouble answering. Hence, the burden should be on the skeptic to explain why artifacts do not have functions. What is driving the skeptic’s worry is, in part, that the functions of artifacts are in some cases unclear or unknown, or that they change over time. I simply grant this point; there are cases where the function of an artifact is difficult to specify with any precision, such as with ropes and hooks. But this does not change the fact that there are common instances where an artifact’s function is clear, such as lawn mowers, screw drivers, and steering wheels. It is also true, as I have suggested above, that artifacts with clear functions can be used for purposes other than these functions, but this also does not change the fact of what an artifact’s function is.

The “fact” of what artifacts are for and how they work (when such there are) is in my view an institutional one, dependent on or relative to the beliefs of people in society. To determine the function of an artifact, we can appeal in many cases to the designer’s intentions and the causal history of the artifact, but these in the end will have to cohere with the collective beliefs of society at large (Scheele 2006). Appeal to collective beliefs will again sound relativistic to some ears. But as John Searle notes, features of objects that are observer relative can be ontologically subjective in the sense that they depend on observers for their existence, but they are nevertheless epistemically objective because it is not just an individual’s subjective opinion or evaluation that makes them true (1995).[[5]](#footnote-5) Yes, the function of certain artifacts could have been otherwise, but the values attached to money could have been otherwise too and we have no difficulty in saying that a nickel *really is* worth 5 cents. Similarly, we should have no trouble in saying that a lawn mower’s function really is to cut grass.

§2 Medical Devices

What I am concerned about is ethics, and whether one intends to mow the grass or annoy the neighbors is not of any obviously important ethical concern. But one only has to reflect for a moment to see how my thesis about artifacts becomes ethically important. To suggest that you could use an artifact for another purpose and *not* intend the purpose that is brought about would be like suggesting you could fire a gun at a person’s head and say you did not intend grave harm to the person, only to produce a beautiful piece of artwork from the blood spatter. I think this example is analogous to the beheading thief, except that with the introduction of an artifact (a gun) and its function we have a principled reason for rejecting the duplicitous first person account of the intended means. The artifactual character of the gun is a fact about the world that dictates what descriptions of his intention the agent must admit. That the artifact has the function it does is a principal condition of the means that is chosen—it cannot be ignored or wished away.

One particular set of artifacts that commonly has ethical significance when used in action are medical devices. I will in what follows revert back to non-medical devices in order to illuminate certain claims, but there are two reasons to focus on medical devices for the remainder of the paper. First, medical devices are somewhat unique in that they are a kind of artifact in which it is reasonably possible that we could achieve the intended function while using it for some other purpose. In most contexts, it is hard to imagine artifacts that, when used for purposes other than those for which they are intended, we also bring about or risk bringing about their functions. If I use my screwdriver to open a can of paint, it is hard to see how I could in any way achieve the function of the screwdriver simultaneously. Even the lawn mower example above is somewhat implausible. But medical devices, especially drugs, can sometimes allow instances of bringing about their functions while using them otherwise.

Second, and more importantly, it is helpful to focus on medical devices because such focus can determine clearly an artifact’s function. It is easier to specify what the function is for a medical device because these devices take place within the context or practice of medicine. Kevin Flannery has suggested that recognizable patterns of behavior that tend to some basic human good, or what he calls “fixed paths,” are relevant to moral assessment of actions and he further argues that these fixed paths are intelligible as the kinds of actions they are because of their place within an established social practice (2001).[[6]](#footnote-6) The paths are “fixed” in part because they are constrained in some ways by the practice in which the act takes place (in order to be a meaningful act of the kind that it is) as well as because an agent has to intend the means to his end. It is easy to see how the function of medical devices can be a fixed path in this sense. To start, we have the intentions of the designers of the device. Drug manufacturers, for example, develop medications with certain aims and these aims often remain stable when the drug is used. In the practice of medicine, the functions of devices are referred to as indications and doctors prescribe the use of certain devices for these indications. In many cases, the function of the medical device (both what it aims to treat and its mechanism of action) is listed clearly on the packaging or the prescribing information of the device. These indications are separated clearly from the side effects of the device. Moreover, in most countries there exists a regulating body such as the FDA that approves a drug for a specific indication, based on the relative safety of the drug and its efficacy for the particular usage being investigated. Therefore, all of these factors compose a practice of professional medicine that makes the function of medical devices in many cases quite clear and incontestable.

Now that we see the reason for turning to a certain kind of artifact, let us amend the thesis accordingly: if an agent knowingly uses a medical device for a purpose other than the device’s function, and that device achieves its function in the proper way, then the function is not a side effect of the action. In other words, if it is part of the agent’s plan to take a drug, and the drug works according to plan, then it is part of the agent’s plan that the drug work according to plan. Here is an example parallel to the lawn mower example but using a medical device. Suppose a woman takes an aspirin not with the ultimate intention to relieve her headache but rather to get her husband to stop pestering her to take an aspirin. She may even say she does not care about her headache at all. In such a case, I would say that if the agent’s headache is relieved, she still intends this effect, for she intends it as a means to her end. And this for all the same reasons given above. Of course, just as with artifacts generally, uses of drugs for reasons other than their actual functions do not force agents to intend the actual functions except when these functions are knowingly brought about.

It is important to note that my thesis makes room for the possibility of an artifact with more than one function, which is common enough with medical devices. In a significant number of cases, the function of a medical device has multiple indications and multiple mechanisms of action, each of which are defined in the practice of medicine. This might seem to raise a problem of the following type: if an agent uses a medical device for one indication, and the use of that device also brings about a second indication, does the agent therefore necessarily intend this second indication? It seems to me she does not. Because the agent has intended (at least) *one of* the device’s functions, this description of the action is still consistent with choosing the device as a means and with the inherent intentionality of the device. In this kind of case, the effect is multiplied, so the agent can in fact legitimately apply the distinction between intention and foresight in her practical reasoning. For example, Lamictal is an anticonvulscant medication primarily used to control seizures but also functions as a mood stabilizer; if an agent’s mood is stabilized while intending to control one’s seizures, the intentional structure of the device itself gives no reason to insist that the agent intends *both* functions, only that he intends one of them. The multi-pronged function of artifacts is a feature that should not overdetermine an agent’s intended means.

Because many medical drugs have morally neutral or morally good ends, bringing them about intentionally even without wanting to is not usually controversial. We do not have deep ethical worries about whether the woman who takes an aspirin intends to relieve her headache. But when it comes to medical devices surrounding pregnancy, ethical concerns emerge quickly. A straightforward moral application of my thesis would be as follows. A pregnant woman knowingly uses mifepristone, a drug whose actual function is to induce an abortion (among other functions), as a means to keep her husband from nagging her about the pregnancy; the drug induces an abortion; does she intend an abortion? On some theories of intention, it would seem that because she does not desire and pick out an abortion as part of her plan (she would be happy enough still to remain pregnant), she does not intend an abortion and this effect can be safely viewed as a side effect.[[7]](#footnote-7) On my view, however, assuming the woman has sufficient knowledge about mifepristone, she intends an abortion as a means to her end and this because of the antecedent function of the drug. It seems wrong to see an abortion as a side effect here.

Still, it might be objected that this example is, like the thief example, an implausible or duplicitous account of an agent’s practical reasoning, for it is not clear that an agent really would reason in this way or if she does reason in this way, it is a case of “obvious” self-deception and so we should reject the agent’s account of her motivating reasons. I do not see what clear grounds there are for saying this is an obvious case of self-deception given the kind of authority the agent’s own perspective is granted in some accounts of intention. Nevertheless, I focus instead in the remainder of the paper on an example where this kind of circuitous practical reasoning is actually defended by scholars, namely using emergency contraception and viewing any abortifacient effect as a side effect.

§3 Emergency Contraception

Emergency contraception refers to various measures that may prevent pregnancy when used after sex. I will restrict my attention for now to the emergency contraceptive pills that are currently available in the U.S., of which there are three forms: pills that contain both of the hormones estrogen and progestin, pills that contain a progestin only (usually levonorgestrel), and pills that contain the antiprogestin ulipristal acetate (the name brand of which is Ella).

Central to the ethical questions related to emergency contraception is whether or not Plan B[[8]](#footnote-8) has an abortifacient effect, which is an effect that induces an abortion. Many people argue that it is not controversial at all whether emergency contraception has an abortifacient effect because there is a scientific consensus that the morning-after pill never interferes with an established pregnancy. But this claim depends on the medical definition of “pregnancy,” which insists that pregnancy begins with the implantation of the fertilized egg in the uterus. While it can be granted that emergency contraception does not end a pregnancy, if the morning-after pill has any *post-fertilization* effects, this constitutes an abortion in the eyes of the pro-life position because it ends the life of an early human being. If life begins at conception, which I will assume for purposes of this paper, preventing a pregnancy after the point of conception is gravely wrong.

So the controversy about whether emergency contraception has an abortifacient effect amounts to whether there are any post-fertilization effects. According to the label on Plan B itself, the drug prevents pregnancy by one of three mechanisms: interfering either with ovulation, fertilization, or implantation. Only the last scenario is abortifacient. While it had been thought several decades ago that a post-fertilization effect was common in hormonal forms of contraception, studies have since tended to show that the drug works primarily by preventing ovulation (E. Raymond et al., 2000; L. Marions et al., 2002). However, most experts tend to concede that a postfertilization effect cannot be ruled out. For example, a leading scholar on emergency contraception, James Trussell, who directs the Office of Population Research at Princeton and is pro-choice, writes that “women must know that [emergency contraceptive pills]…prevent pregnancy primarily by delaying or inhibiting ovulation and inhibiting fertilization, but may at times inhibit implantation of a fertilized egg in the endometrium” (2011, 6). I proceed, therefore, under the assumption that the post-fertilization effect of emergency contraception is a possible but rare mechanism of action. The ethical question is normally thus: under what circumstances or moral reasoning if any would it be permissible to use emergency contraception, given a possible but rare mechanism of action that destroys a fetal life?

When the permissibility of using or dispensing emergency contraception is defended by scholars or medical practitioners who are concerned about the early fetal life, it is almost always on the basis of taking the drug and simultaneously not *intending* any abortifacient effect. The argument is that a woman can use the morning-after pill, intending only the first two mechanisms and viewing the third mechanism, if it occurs, as a side effect (Sulmasy 2006; Stangl 2009).[[9]](#footnote-9) Here, the intended end of taking the contraceptives is not to prevent *pregnancy*, where pregnancy is medically defined as the implantation of a fertilized egg, but rather to prevent *conception*, when the egg is fertilized.

Those who insist that emergency contraception can be taken without intending the harmful effect have typically argued their case as part of a larger strategy to justify the action as an application of the principle of double effect. They argue of course that a post-fertilization effect is not intended as a means since, in this case, the agent’s ultimate end (preventing conception) is not brought about. I will argue that this account is wrong and, consequently, double effect does not apply properly to the case of emergency contraception. However, I should note that there are a number of scholars who also argue that double effect does not apply to using emergency contraception, but they give different reasons from the ones I give here (e.g. the harmful effect cannot be legitimately foreseen). Some commentators who concede that double effect does not apply still go on to argue for the permissibility of emergency contraception, and they do this partially on the grounds that the woman who takes it does so with a certain intention, namely an intention not to prevent pregnancy but fertilization (Cataldo 2009, 136). So my target for this paper is not limited to those who think they have a legitimate application of double effect, but includes anyone who maintains the abortifacient effect of emergency contraception can be safely viewed as a side effect.

Let me clearly bring to bear the argument I have given in the first two sections to the case of emergency contraception. The person who knowingly takes emergency contraception cannot magically decide all by herself what she intends and what she does not. Her intention is limited by certain facts about the world, including the function of emergency contraception, i.e. what it is for and how it works. We know that emergency contraception is intended to prevent pregnancy, and “pregnancy” is defined among medical professionals as the implantation of a fertilized egg.[[10]](#footnote-10) We know moreover that among the mechanisms of emergency contraception, though apparently rare, is the destruction of an early human embryo prior to implantation. If the drug prevented someone from getting pregnant by killing her or destroying her uterus, we would not say that the drug worked as intended. These are institutional facts about the nature of emergency contraception. That emergency contraception has the functions, including mechanisms of action, that it does depends upon the medical profession’s collective beliefs about the drug. And these beliefs are all well-established (though, admittedly, capable of change).

Once these points are in place, it is not completely up to the person using emergency contraception to determine how *she* intends to use the drug, for the drug already carries with it an intended end and a set of intended means, among them the death of a fetal life. The important point is that if the abortifacient effect occurs by taking Plan B, it does not do so as a side effect but as an integral means or a fixed path to what it is supposed to be doing, preventing pregnancy whether pre- or postfertilization. It is morally relevant, I contend, that we do not find “prevention of implantation” listed among Plan B’s possible side effects alongside nausea and vomiting. Instead, when the abortifacient question with respect to emergency contraception arises, it is never a question of the drug malfunctioning.

To help motivate the application, it might help to consider an analogy. A lethal injection is typically composed of several chemicals which are meant to kill a person through one of several means including asphyxiation and cardiac arrest. One cannot very well carry out a lethal injection and only intend to kill someone by cardiac arrest but not by asphyxiation (perhaps because one has moral qualms about asphyxiation causing unnecessary suffering), for it is the nature of the injection to kill by asphyxiation failing the method of cardiac arrest.[[11]](#footnote-11) Likewise, it is the nature of the function of emergency contraception to prevent pregnancy by preventing implantation failing the method of pre-fertilization techniques.

This analogy is not perfect, however, because if one intends selective means in the case of a lethal injection, one would still share the same end of the injection, which is not true in the case of emergency contraception. But emergency contraception poses an unusual obstacle for finding tight analogies because the mechanisms of action are sequential, disjunctive, and exclusive. Here is a fabricated analogy that shares these features with the case of Plan B.[[12]](#footnote-12) A man’s property is bordered on one side by a field of horses. The border already is divided by an electric fence that gives a slight shock to a horse that might venture on to the man’s carefully manicured lawn. However, because this fence proves ineffective (well-mowed grass is particularly tender and tasty to a horse), a man builds a second fence along the same border that will send a more intense shock should the horse make it past the first fence. This proves effective for a while, until a horse becomes numb to the second shock and begins to graze on the man’s property. At his wit’s end, the man finally builds a third fence that will electrocute any horse that makes it past the first two fences, though the man hopes it will not come to that. The three adjacent fences share a single switch. The man turns on the switch and at some point one of the horses is killed by the third fence. Is the horse’s death a side effect of the use of the 3-fence device? It would seem that it is not, for the fence in fact achieved just what it was intended to achieve and the man used the fence knowing this was the case.[[13]](#footnote-13)

Of course, the user of the device in this analogy is also the designer of the device, but to separate user and designer does not make a difference with respect to intending the means provided that the user knows how the device works and wills the device as a means to his end. That the agent has to be well-informed about the function (means-end combination) of the device he uses is important to keep in mind in the emergency contraception case as well. One does not intend the abortifacient effect if one accidentally takes Plan B instead of a daily vitamin, nor does one intend the abortifacient effect if one lacks sufficient information about the mechanisms of action. Similarly, the intentional structure of the device does not wholly constrain the agent’s intentions such that whatever is a side effect of the device must be a side effect of the action (an agent can still intend to kill as an ultimate end with a screwdriver or Plan B). Again, the perspective of the agent is necessary for knowing what an agent intends, even though it is not sufficient.

It might be objected that in the case of emergency contraception the evil effect is only a *possibility* (making it different from the mifepristone example earlier)—and a rare one at that, facts which seem to have moral significance. First of all, what is being risked is not properly an effect but a means to an end according to the structure of the drug. A rare mechanism of action is still a mechanism of action and so must be included as part of the function of the drug and one of the possible means. To intend to use a drug as a means carries it with an intentional structure even where that structure gives only a disjunctive set of means (or ends). And just as when agents intend only one of several possible means to come about we still count the means that does come about as intended, so too with artifacts. Second, while I do think that the probabilities of the abortifacient effect occurring are relevant to some kinds of moral analysis, they are not relevant to mine. The probabilities typically come into play when scholars are discussing whether the good end of the action is proportional to the “unintended” harmful effect. The question I address in this paper, recall, is that *when and if* the abortifacient effect occurs, does one intend this effect or not?[[14]](#footnote-14)

One objection to my account might run as follows: it would seem that the woman who takes *regular* contraceptive pills to treat her endometriosis cannot count the anti-fertilization effect as a side effect. This would be an unwelcome consequence, for indirect prevention of fertilization that is brought about as a side effect of legitimate therapeutic purposes has been consistently defended even by the Catholic Church (*Humanae Vitae* 15). I need not accept this consequence, however, because using contraceptive pills to treat endometriosis, for example, *is* a function of the drug available to persons within the practice of medicine. While not all birth control pills clearly say so, they are medically indicated for endometriosis, among other therapeutic ends. Taking or dispensing anovulatory hormones for certain therapeutic ends is a recognizable pattern of behavior that takes place within the context and institutions of professional medicine. Thus an agent can at least in some cases use a device and legitimately intend only one of its functions. Compare this to emergency contraception. Taking or dispensing emergency contraception with the intention to exclude any postfertilization mechanisms is not a recognizable pattern of behavior in the practice of medicine. This subjective function for the drug is instead like taking an aspirin in order to avoid nagging from one’s spouse. The paths of medical devices are fixed within the practice of medicine.

If the argument in the paper is correct, defining “pregnancy” the way that the medical establishment does can be directly relevant to what agents intend or do not intend when they intend to use certain medical devices. If a drug aims to prevent pregnancy rather than conception, then any mechanism that achieves *that end* has to count as successful.[[15]](#footnote-15) If pro-life concerns of the sort raised in this paper are not deemed important, then the mechanism of action for Plan B is a trivial matter. The effectiveness of the drug is what matters most, and the effectiveness has to be measured against the end that is sought. If pregnancy had been defined as beginning with fertilization (or is defined that way in the future), then prevention of implantation could not count as a mechanism of action and one would never be in danger of intending an abortion. Again, relativistic worries seem to emerge here, but as in section two, I fall back on the institutional analysis of what the function of a medical device in fact is.

I have tried to argue that if there is an abortifacient effect, then the effect is not a side effect of one’s action.[[16]](#footnote-16) I have carefully expressed this thesis so as not to take a clear or determinate position on emergency contraception as such. I believe that the empirical question of whether emergency contraception actually does utilize post-fertilization mechanisms makes an important difference. It might be thought that since the indication of emergency contraception (to prevent pregnancy) is in all likelihood not going to change, then it is impossible for empirical research to make any difference to my argument because one will have to intend something they do not want to intend. But this would be to mistake my view. I concede that an agent could take a drug designed to prevent pregnancy for the purpose of preventing conception, and she could do this without ever intending an illicit means of preventing pregnancy. How so? If we know that there are no post-fertilization effects, then emergency contraception becomes morally similar to barrier methods: it prevents pregnancy without interfering with a fertilized egg. One can use a condom and intend to prevent conception without fear of intending an abortifacient effect because no such effect can occur.[[17]](#footnote-17) Likewise, if empirical research eliminates the possibility of an abortifacient effect, it would be unproblematic for someone to take emergency contraception with only the intention of it acting as a true contraceptive since in such a case that is just what it would be.[[18]](#footnote-18)

I close this section with a final observation that deals again with double effect. When the doctrine of double effect prohibits intending harm as a means, it typically formulates this prohibition as one placed *on the agent*. For example, it is required that “the agent intends the good and does not intend the evil either as an end or as a means” (Cavanaugh 2006, 36). This way of putting things is certainly right because it is the agent, and not a material object such as a medical device or an artifact, that does the intending in the end. However, it could be misleading because it could suggest that the agent has complete, *interior* control over what she chooses to intend or what she does not, given any specific course of action. I suggest that it would be more precise to formulate the condition as Joseph Boyle does: it is necessary that “the harms are not intended but brought about as side effects” (1991, 476). Omitting any mention of the agent or the agent’s perspective leaves open the possibility that what is intended and what is a side effect can be determined in part by certain objective features of the world. Moreover, because Boyle describes what can be viewed as a side effect in the passive voice, he suggests that merely because the agent might view (or be motivated to view) a certain effect as a side effect, that description of her intentional action may not be veridical.[[19]](#footnote-19) I do not see how we can say in the case of emergency contraception that the abortifacient effect is “brought about” as a side effect.

§4 Conclusion

The thesis I have tried to argue for in this paper is certainly limited because it only pertains to actions that use artifacts, and even here it only applies in certain contexts. For example, there is no way to know from what I say in this paper whether an agent who uses a condom does so in order to contracept or to prevent the transmission of AIDS or both; the only thing my thesis requires is that she has to intend one of these functions should one be brought about. Thus, I do not suppose that my analysis can in any way replace the need for a thorough account of the distinction between intention and foresight.

However, the importance of the intentional structure of artifacts does, I think, show what is misleading about some parallels between emergency contraception and other kinds of actions that do not use artifacts such as breastfeeding. Some scholars (Stangl 2009; Trussell 2011) have observed that the changes in the endometrium that possibly prevent implantation of a fertilized egg in the case of emergency contraception also occur when one is breastfeeding. The implication is that there can be no distinction between these two kinds of actions; either the abortifacient effect is intended in both cases or it is a side effect in both cases. But the difference between the two cases is precisely the *type* of action being performed and the differing purposes of each action. If breastfeeding has a natural function, it would be hard to argue that it is other than nourishing the baby whom one feeds. So if an abortifacient effect occurs when an agent intends to breastfeed, it clearly is a side effect from an objective standpoint and so this action is significantly distinguished from the case of emergency contraception.

The Catholic Church has long taught the Aristotelian thesis that natural objects and actions themselves have purposes inherent in them that provide constraints on what agents intend. Most notably, sex is said to have only unitive and procreative purposes. If this is true, then no pregnancy that results from two persons freely choosing to have sex is a side effect of this action. These kinds of metaphysical claims about natural teleology, though defensible, are of course highly controversial. On what basis can we persuasively argue what *the* function of sex or of breastfeeding is? An advantage of the position that I argue for in this paper is that it does not require controversial metaphysical claims about *natural* teleology, for the functions that we find in artifacts are not given by God or by nature, but by ourselves. If what we intend as a means is constrained in the way that I describe, then we have only ourselves to blame.[[20]](#footnote-20)

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1. We might say that he brings about the noise intentionally, if what is meant in this sense of “intention” is that he is aware of the noise as a consequence of his action. This broad sense of intention is not relevant to this paper. [↑](#footnote-ref-1)
2. For a different view, see Finnis, Grisez, Boyle 2001 and Tollefsen 2006. [↑](#footnote-ref-2)
3. As Anscombe writes, “circumstances, and the immediate facts about the means you are choosing to your ends, dictate what descriptions of your intention you must admit” (2001, 63). [↑](#footnote-ref-3)
4. It is another matter, about which I remain silent, whether artifacts themselves have moral agency. [↑](#footnote-ref-4)
5. Searle at one point identifies institutional facts with objects that have a “status function,” or a function that depends upon collective cooperation. In this regard he distinguishes objects that have a status function, such as money, from objects that can be used for a certain end based on the sheer physical features of the object (i.e. independent of collective beliefs), such as a chair. Searle is right to draw a distinction here, but because his interest lies with status functions and not the metaphysics of artifacts, he was not interested in asking whether an artifact really has a certain function: “If it has a certain kind of shape, we can use it as a chair regardless of what anyone else thinks” (1995, 44). [↑](#footnote-ref-5)
6. Flannery applies his discussion of fixed paths to the double effect debate about craniotomy, arguing that this procedure or treatment is not a practice defined by modern medicine. There are some important parallels between the function of artifacts and the function of procedures or treatments, however I believe that specifying the latter is more controversial. [↑](#footnote-ref-6)
7. Again, this is not to imply that these theorists would say that using mifepristone in this way would be morally permissible (for there might be other reasons that it is not) but rather to say that their theory of intention does not require them to view the abortion as intended. [↑](#footnote-ref-7)
8. Plan B is a brand name for a progestin only emergency contraceptive pills. I use the term in this essay more broadly to refer to all three kinds of emergency contraceptive pills mentioned above. However, see also note 18. [↑](#footnote-ref-8)
9. These two defenses of causing the abortifacient effect as a side effect occur in different contexts. Sulmasy’s view is extremely restricted because he is considering the possibility of using Plan B after sexual assault in a way consistent with positions of the Catholic Church. [↑](#footnote-ref-9)
10. It might be somewhat surprising that prevention of pregnancy is the function of the drug rather than prevention of conception, but this is in fact the case. See, e.g., Trussell and Raymond 2011 and Allen and Goldberg 2007. This function seems to depend on the empirical fact that a pregnancy (but not, right now, conception) can be medically detected. [↑](#footnote-ref-10)
11. The precise cause of death from a lethal injection is unclear, but it is recognized that each chemical of the injection can be lethal when administered alone. See Zimmers 2007. [↑](#footnote-ref-11)
12. I am grateful to John Zeis for this example. [↑](#footnote-ref-12)
13. One might object that this case is misleading because the three fences are all distinct from one another such that it would be possible to have the first two without the third, whereas with emergency contraception the three mechanisms might not be separable in this way. I grant the force of this objection and only note that the example was intended to come up with a case that shared the three features of emergency contraception mentioned (a means that is sequential, disjunctive, and exclusive), not every feature of emergency contraception. [↑](#footnote-ref-13)
14. If I am right that sometimes the abortifacient effect is intended in the case of Plan B, this does not necessarily mean it is morally equivalent to obtaining an abortion. The fact that the harmful means is only *risked* is likely relevant to the overall ethical evaluation. [↑](#footnote-ref-14)
15. Hence, what I say about emergency contraception can be applied to regular hormonal contraception, should there be any postfertilization effects of this kind of drug as some contend. [↑](#footnote-ref-15)
16. It might seem that the *conditional* nature of my thesis fails in the following way: one can keep on using a medical device and get off the hook, so to speak, of intending a harm as long as the harm does not come about. This concern, however, overlooks the way that moral analysis functions antecedently to action as a method of practical reasoning. The scholars who wish to use double effect to justify causing a harmful effect with a medical device do so in a conditional way: if the abortifacient effect comes about, then that effect is not intended. If my thesis is right, agents cannot reason in this way. [↑](#footnote-ref-16)
17. Of course, one cannot use a barrier method as an *emergency* contraceptive, but that is not relevant to the point I am trying to make here. [↑](#footnote-ref-17)
18. Given the relevance of the empirical question, the different forms of emergency contraception become important. The mounting scientific evidence that shows a post-fertilization mechanism is unlikely and perhaps very unlikely is only applicable to *hormonal forms* of emergency contraception and not ulipristal acetate (Ella). The empirical research regarding the mechanism of action for Ella is much less decisive. It was no doubt an unintended side effect of the FDA’s approval of Ella that pro-life critics of emergency contraception gained a new foothold to raise the abortifiacient issue. [↑](#footnote-ref-18)
19. Boyle himself does not suggest his formulation is important in these ways and would most certainly reject them. [↑](#footnote-ref-19)
20. I am grateful to John Schwenkler, John Zeis, and John Kelly for reading earlier versions of this paper and offering instructive comments. [↑](#footnote-ref-20)