

Paying People to Risk Life or Limb

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ABSTRACT: Does the content of a physically dangerous job affect the moral permissibility of hiring for that job? To what extent may employers consider costs in choosing workplace safety measures? Drawing on Kantian ethical theory, this article defends two strong ethical standards of workplace safety. First, the content of a hazardous job does indeed affect the moral permissibility of offering it. Unless employees need hazard pay to meet basic needs, it is permissible to offer a dangerous job only if prospective employees have a reason other than hazard pay to choose this job instead of safer alternatives. Second, employers typically cannot justify omitting expensive safety measures by paying employees more, even if employees prefer higher pay to greater safety. Employers offering dangerous jobs must meet these two standards to avoid treating their employees merely as means.

KEY WORDS: doctrine of double effect, employment, hazard pay, risk, formula of humanity

Many jobs endanger employees' lives or health: logging, fishing, mining, fighting fires, fighting wars, and driving cars or trucks, to name just a few. What ethical constraints are there on paying people to risk their lives or their health in service of an employer? Most scholars agree that employers should disclose risks to prospective employees.¹ Some ethicists, such as Powell and Zwolinski (2012), think that informed consent is sufficient to make dangerous work ethical. Others argue that employers hiring workers for dangerous jobs must also provide fair hazard pay, institute safety measures, or both (Arnold, 2009; Arnold & Bowie, 2003; Preiss, 2014; Wertheimer, 1999; see also Meyers, 2004). The ethical constraints that have been identified so far in the literature do not fully explain when it is wrong to pay people to risk their lives or their health. They do not make clear the extent to which the content of dangerous jobs is relevant to the moral permissibility of offering them, or the extent to which employers may take costs into account in choosing safety measures.

This article makes a Kantian argument: to avoid wrongly treating employees as mere means, employers must meet a high standard of workplace safety. I defend two claims. First, the content of a hazardous job does indeed affect the moral permissibility of hiring someone for that job.² When pay is the only reason to take a dangerous job rather than a less dangerous alternative, it is wrong for an employer to offer that job.³ My second claim concerns the ethical standard for deciding which safety measures are necessary. I argue that employers typically cannot justify omitting expensive safety measures by paying employees more, even if employees prefer higher pay to greater safety.

My defense of these claims derives from Kantian concerns about the relevance of motive in moral decision-making. I argue that the ethics of inviting people to take physical risks depends on the role that the risks play in their decisions. If the very fact

that someone will be exposed to risk is a means to someone's ends, this risk is ethically more difficult to justify than a risk that is merely foreseen. This claim is an extension of the doctrine of double effect, a traditional though controversial moral principle. I will defend this principle and its application to risk using Kantian ethical theory. I then argue that if hazard pay is the only reasonable motive for taking a job, or if it is the only reasonable motive for agreeing to the omission of a safety measure, it transforms foreseen risks into intended risks. Most people who climb trees do so in spite of the risk of falling and getting injured, not because of this risk. By contrast, contract climbers in the American tree care industry climb trees partly because of the risks, as a means to a wage premium.⁴ Tree-care companies hire contract climbers to do unusually dangerous climbs. Contract climbers earn substantially higher daily wages than regularly employed climbers, and it is understood that part of the premium is compensation for greater risk. There is no reason other than the wage premium to work as a contract climber; it is highly skilled work, but the safer work of a regularly-employed climber expresses the same skills. Since contract climbers do dangerous climbs to get hazard pay, they do dangerous climbs because of the risks, not in spite of them. Drawing on the doctrine of double effect, I argue that it is objectionable for climbers to intend risk in this way or for tree-care firms to hire climbers knowing that the climbers will intend risk in this way.

The doctrine of double effect is a crucial premise in my argument. I argue that the doctrine of double effect is an expression of Kant's formula of humanity: to intend harm to someone as a means to an end is to treat that person's humanity as a mere means. I further argue that the Kantian grounds for the doctrine of double effect support application of the doctrine to physical risk, as well as to harm.⁵ Though many Kantian ethicists choose not to invoke the doctrine of double effect by name, the idea that Kantian ethics concerns itself with agents' motives is familiar (Smith & Dubbink, 2011). Others have offered defenses of the doctrine that are either explicitly Kantian or inspired by Kantianism (Nelkin & Rickless, 2014; Quinn, 1989). I cannot defend the Kantian ethical framework itself here, but note that it is one of the major theoretical frameworks used in business ethics (see Bowie, 1999; Smith & Dubbink, 2011). It has also been used fruitfully to examine the ethics of another type of risk: financial risk (Scharding, 2015).

Section one explains the doctrine of double effect. I present a Kantian defense of this principle and argue that if this defense is sound, the principle extends to intended risk as well as to intended harm. Section two shows how an offer of hazard pay can transform the risks of an activity from merely foreseen risks to risks that are intended as means to an end. When hazard pay is the only reasonable motive for taking a dangerous job over other alternatives, workers who take the job intend to assume risk as a means to the end of higher pay. Section three argues that it is normally wrong to offer a dangerous job if workers who take the job would intend risk to themselves as a means to higher pay. Thus, a job offer that includes explicit or implicit hazard pay is morally acceptable only if either (a) taking the hazard pay is necessary to bring about a very great good, such as employees' survival, or (b) prospective employees have reasons other than a wage premium to choose this job over alternatives. Sections four and five discuss more concretely which hazardous jobs satisfy these conditions and which do not. Section six concludes.

1. INTENDED RISKS AND MERELY FORESEEN RISKS

My analysis of the ethics of hazard pay rests on a moral distinction between intended risks and merely foreseen risks. To see the difference between intended risks and merely foreseen risks, consider two motives for releasing pollution. When a factory releases pollution, the factory's operators may know that the pollution will expose people to health risks. These risks are not means to the factory operators' end of manufacturing goods for sale. The risks are foreseen but unintended side effects of the factory's operation. By contrast, suppose that a medical researcher wishes to study the effects of an extremely low dose of a toxin. This researcher releases the toxin into the water supply with the intention of seeing how the release of the toxin influences disease rates in the affected area. For the researcher, the fact that a population is exposed to a risk is a means to the end of obtaining knowledge about the toxin's effects. The researcher thus intends the risks of pollution, rather than merely foreseeing them. The researcher may hope that the risks do not materialize; the point of the study may be to show that an extremely low dose of the toxin is harmless. Nevertheless, the very fact that people are exposed to risk is central to the researcher's plan; risk exposure is a means to the researcher's end.

I shall argue that the rightness or wrongness of engaging in a hazardous activity depends partly on whether the risks themselves are intended or merely foreseen. It is more difficult to justify intending health risks as a means to an end than it is to justify engaging in activities that create foreseen but unintended risks. This claim about the ethics of hazardous activities is an extension of a traditional nonconsequentialist ethical principle: the doctrine of double effect. After briefly describing the traditional doctrine, I will explain why Kantian ethical theory supports it. I will then argue that the doctrine should be applied to risk as well as to predictable harm.

Philosophers have defended several formulations of the doctrine (Fitzpatrick, 2012). I will use a non-absolutist form of it here. If the reasoning that motivates a harmful action involves intending harm either as an end or as a means to an end, then absent some special justification, the action is wrong. Only a *very* great good would justify the intended harm. (I will make clear later which goods justify intending which harms.) If, on the other hand, the agent performs a harmful action for some other reason—the agent foresees the harm, but does not intend the harm as an end or as a means to an end—a lesser justification for the harmful action would suffice.⁶ The standard illustration of the doctrine of double effect is the distinction between strategic bombing and terror bombing. A strategic bomber targets an enemy's munitions factory knowing that the bombing will kill some innocent civilians. The strategic bomber foresees the death of civilians but does not intend these deaths as a means to a military end. A terror bomber targets the enemy's civilian population intending that the deaths of civilians will cause fear in the population and that this fear will in turn hasten the end of the war. The terror bomber intends the deaths of civilians as means to a military end. The doctrine of double effect implies that if bombing would achieve good ends by causing civilian deaths, those good ends must be very great indeed to justify the bombing (if it can be justified at all). The straightforward

calculation that the terror bombing will save more lives than it destroys, by hastening the end of the war, will not justify the bombing. The burden of justification for strategic bombing is lower; there are goods that justify strategic bombing that do not justify terror bombing.⁷

Various rationales have been offered for the doctrine of double effect (see, e.g., Nagel, 1986; Nelkin & Rickless, 2014; Quinn, 1989; Wedgwood, 2011).⁸ The core idea of most defenses of the doctrine is that harms a person intends are more difficult to justify because they are more deeply connected with the person's agency than harms a person merely foresees. Here, I will offer a Kantian account of this connection and its moral significance. Incorporating harm into one's plans, either as an end or as a means to an end, involves endorsing that harm in a way that puts one's reasoning in tension with other rational commitments. When one foresees harm as a result of an action or omission, but one does not incorporate the fact of harm itself into one's plans, one does not endorse the harm in a way that yields such a tension in one's reasoning.

I shall offer two arguments building on this idea, one based on the formula of humanity, one based on the formula of universal law. The arguments share a pair of premises regarding the rationality of consenting to death or injury. First, it is irrational for people who have projects that extend into the future to consent to be killed.⁹ The simplest explanation of this rational requirement is that people who have ends are rationally committed to creating or maintaining the necessary conditions for pursuing those ends. Maintaining one's agency is a prerequisite for completing temporally extended projects. So, to the extent people are committed to temporally extended projects, they are committed to maintaining their agency. Herman (1989: 419) and Korsgaard (1996: 98) both make arguments of this form.¹⁰

Since people can exercise rational agency while seriously injured, a requirement to preserve one's agency does not entail a requirement to avoid injury. People are rationally required to avoid major compromises of the effectiveness of their agency, such as serious injury, because people have future duties that are difficult to predict. Since we know we will face moral demands we cannot predict, we have reason to prepare to fulfill these unpredictable duties by ensuring that we continue to have all-purpose means of agency, means that are useful for all sorts of possible purposes. A healthy body is one of these all-purpose means.¹¹ Consequently, one has reason to avoid major physical injury.¹² One can rationally endorse an intentional injury to oneself only when the injury is a means to fulfilling an important duty whose requirements are known and clear. Perhaps, for instance, there are circumstances in which one has a duty to save a life, even if an injury to oneself is a means to doing so. Perhaps parents' duty to protect their children's health sometimes justifies them in intending an injury or a risk of injury to themselves.

That people cannot rationally consent to certain harms does not, by itself, explain why intended harm is morally different from merely foreseen harm. The Kantian categorical imperative explains how these two ways of causing harm differ morally. The simplest Kantian argument for the doctrine of double effect is based on the formula of humanity: "So act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means"

(Kant, 1996 [1785]: 80, Ak. 4:429). To treat someone's humanity merely as a means is to pursue one's own purposes by treating a person in a way to which that person could not rationally consent (Hill, 1980). This does not mean that one must treat every person in a way that maximizes the satisfaction of his or her current preferences. (That would be impossible, since people's preferences conflict.) Rather, it means that one must treat every person in a way that he or she could endorse without violating commitments that cannot be rationally abandoned. Among these commitments are the commitments to self-preservation just described. So, the formula of humanity implies that it is typically wrong to intend death or serious bodily harm as a means to one's ends. Acting in a way that foreseeably causes harm, but without intending this harm, does not fall afoul of the "mere means" prong of the formula of humanity. Causing harm without intending it may involve a failure to take someone's interests sufficiently seriously, and thus a failure to treat the person's humanity as an end. But one can treat a person's humanity merely as a means only if the compromise of the person's agency is itself a means to one's own ends.

The formula of universal law also supports the doctrine of double effect. The formula of universal law assesses the morality of an agent's decision by assessing the reasoning that motivates the decision, the agent's "maxim." The agent's maxim is ethically sound only if the agent could consistently endorse all other rational agents publicly accepting and following this maxim.¹³ If endorsing others' acting on this maxim would be inconsistent with a commitment the agent has and cannot rationally give up, the maxim is unsound.¹⁴ To the extent that a person has future-directed projects, the agent has a qualified rational commitment to maintaining rational agency and its effectiveness. An agent contradicts this commitment if he or she endorses any agent (him- or herself, or someone else) acting on a maxim according to which there is a reason to injure him or her, either as an end or as a means to some further end. The agent cannot escape this contradiction by abandoning commitments to future projects if the maxim itself presupposes such commitments (Herman, 1989: 419; Korsgaard, 1996: 98). Though the formula of universal law supports a strong prohibition on intentional physical injury, it does not entail a strong prohibition on acts that cause harm that is foreseen but not intended. If someone causes injury knowingly, but the injury is not the agent's end or a means to the agent's end, then the fact that someone will be injured is not part of the agent's maxim of action. If the agent endorses everyone acting on this maxim, the agent does not thereby endorse anyone injuring him- or herself. So, the formula of universal law supports the doctrine of double effect: the ethical reasons to refrain from intentional injury are stronger than the ethical reasons to refrain from actions whose harmful effects are foreseen but not intended.¹⁵

Though the traditional doctrine of double effect concerns actions that are certain to cause death or harm, the Kantian rationales for the doctrine of double effect would support the doctrine's extension to cases involving risk. The researcher who pollutes the water supply exposes people to risk of death or illness as a means of obtaining knowledge. The researcher thereby uses those people merely as a means. Factory managers who authorize production methods that release pollution do not use the people affected by the pollution as a means (though depending on the effects of the

pollution, they may fail to treat these people as ends).¹⁶ So, the formula of humanity implies that there is a distinction between intended risk and merely foreseen risk. The same is true for the formula of universal law. It is essential to the polluting researcher's plan that people will be exposed to risk. The researcher could not have formulated the plan without thinking about people being exposed to risk and regarding that risk exposure as good (as a means to obtaining knowledge about the toxin). Thus, if the researcher endorsed everyone adopting his or her reasoning, he or she would thereby endorse others making plans that explicitly treat that same risk as good (as a means to a further end). By contrast, it is not essential to the polluting factory manager's plan that people will be exposed to risk. The factory manager could formulate the plan without thinking about the effects of pollution at all. Thus, if the factory manager endorsed everyone reasoning as he or she does, he or she thereby would not endorse any plan that explicitly treats risk to a person as good (either in itself or as a means to an end). Both the formula of humanity and the formula of universal law imply that if the very fact that someone will be exposed to risk is an integral part of a plan, the plan is morally problematic in a way that merely foreseen risk is not.

2. HAZARD PAY AND INTENDED RISK

Thus far, I have argued that there is a moral difference between dangerous activities whose risks are intended and dangerous activities whose risks are merely foreseen. This section argues that under some circumstances—but not all—an offer of hazard pay can transform a merely foreseen risk into an intended risk. To see this, compare two hypothetical cases.

Vacation Drive: A couple has planned a vacation at a mountain cabin. The road to the cabin has many sharp curves, and the side of the road is next to steep inclines with no guardrails. Today there is a storm, which makes the drive risky. The couple decides they do not want to postpone their vacation. They take the drive.

Luxury Delivery: After arriving safely at the cabin, the couple realizes that they forgot to bring the truffles they intended to include in their dinner. They *really* want truffles. The nearest store selling them is at the base of the mountain. The couple locates a private courier who would be willing to drive up the mountain and deliver truffles in time for their dinner. The storm has continued, and the drive is still dangerous. Since there is plenty of demand for the courier's services on safer routes, the courier will only drive up the mountain if the couple pays fifty percent more than the normal price for this delivery. The couple agrees.

The couple and the courier take risks of a similar magnitude when they drive up the mountain in the storm, but their motives for taking these risks differ. The couple foresees but does not intend the risks of driving. They do not regard these risks as good in any way; indeed, the risks are an obstacle to reaching their destination. By contrast, the courier intends the risks of the drive as a means to the end of obtaining a pay premium. The agreed-on hazard pay is the only reason for the courier to make the dangerous drive. Undergoing the risks of the drive is the means

of obtaining this hazard pay. So, the courier regards the risks of the drive as instrumentally good; the very fact that the courier will undergo risks is an essential part of the courier's plan.

Though the courier in *Luxury Delivery* intends the risks of driving as a means to payment, not everyone who accepts hazard pay intends to take risks as a means to an end. Consider another hypothetical.

Emergency Delivery: During the storm, a medical clinic in the mountain resort town gets many unexpected patients and runs out of important supplies. The clinic finds a courier who is willing to drive up the mountain immediately with more supplies. The courier is willing to take the dangerous drive only if the clinic pays fifty percent more than the normal fee for this delivery. The clinic agrees.

The courier's motives in this case are not clear from the above description. The courier could be motivated by hazard pay, just like the courier in *Luxury Delivery*. But the emergency courier may have a different motive. The courier may choose to take on this dangerous task because the courier wants to help patients whose health may be in danger. The courier may demand the hazard pay premium as fair compensation for the risk involved in the drive. It is possible to make one's performance of an activity conditional on receiving some good without making that good one's end. If you doubt this, imagine a person who tells some friends, "I will go on the camping trip with you only if we can arrange for me to have coffee each morning." This person presumably is not going on the camping trip as a means of getting coffee. The driver in *Emergency Delivery* could regard compensation for risk as the camper regards coffee—it is not the driver's purpose in taking on this task, but it is a necessary condition for the driver to consider the terms of the deal fair.

The couriers in *Luxury Delivery* and *Emergency Delivery* receive compensation that is explicitly for the risks they will undergo. A job can have a hazard-related wage premium without having explicit provisions for hazard pay in the employment contract. Hazard pay can be implicit in two ways. First, there may be a shared understanding between employers and employees that employees would have no reason to take a dangerous job without a risk-related wage premium. Suppose that an employer pays workers to engage in an activity that involves significant risks of illness or injury. In this market, jobs that are not dangerous and that are similar to this job in other respects (they require the same skills, are equally pleasant or unpleasant, etc.) are paid a lower wage than the dangerous job in question. Both the employer and the employees are well-informed about the state of the labor market.¹⁷ Under these circumstances, it would not make sense for prospective employees to take the dangerous job unless they were being paid a wage premium for the exposure to risk. It will be obvious that part of the wage—the difference between the wage and the market rate for safer but otherwise comparable labor—is implicit hazard pay. Employees undergo the risks of employment as a means of receiving this hazard pay.

A job may also have implicit hazard pay if there is a shared understanding between employers and employees that a hazard-related wage premium is necessary to make a job fair. Suppose that an employer pays workers for a dangerous job. Workers with

the same skill set could take other, safer jobs making less money. Suppose also that workers have a reason other than the wage premium to take the more dangerous job over the alternatives. Perhaps the dangerous job more fully develops and expresses their skills. Perhaps the dangerous job has social importance that the alternatives do not. Perhaps these workers are part of a tradition they value and do not want to abandon; for instance, perhaps their families have been fishers for generations. Or perhaps the dangerous job is simply more enjoyable than the alternatives. Here, it cannot be assumed that the workers are taking the dangerous job over safer alternatives as a means to the wage premium; they may be motivated by other reasons. There may nonetheless be a shared understanding between employers and employees that fairness requires employers to compensate employees for the risks they take. Again, one can make one's performance of an activity conditional on receiving some good without making that good one's end in performing the activity. (Recall the camper who insists on the availability of coffee but does not go camping for the sake of coffee.)

How common is hazard pay of either type? Standard economic theory suggests we should expect hazard pay to be widely offered when workers have alternatives on the job market (Viscusi & Aldy, 2003; see also Smith 1999 [1776]: 201). If two jobs are available to workers with a given skill set, and one job has an undesirable feature that prospective workers know about, such as physical danger, rational workers will uniformly choose the other job unless the first job has a desirable feature to compensate for the bad one. If all of the non-compensation aspects of two jobs are relevantly similar, except for danger, the more dangerous job will have to pay more to attract workers. This prediction is consistent with the observation that many dangerous jobs have low pay. Physically dangerous jobs are often unskilled or low-skill, and workers are not always well-informed about the risks of the jobs they take. There is evidence that dangerous jobs do tend to pay more than physically safe jobs when skill level and other factors that affect wages are taken into account: "Controlling for skill, status, and occupational stratification, workers in hazardous jobs earn somewhat higher wages than comparable workers in safe jobs." (Robinson, 1986: 665; see also Viscusi & Aldy, 2003). Whether or not dangerous jobs collectively tend to pay more than comparable safe jobs, there are industries in which it is generally understood that certain jobs have hazard-related wage premiums. Contract climbing in the tree care industry, as discussed earlier, is an example.

In summary, the conditions under which workers accept hazard pay affect the motives they may have in taking risks. If hazard pay is workers' only possible motive for taking a dangerous job over safer alternatives (as in *Luxury Delivery*), workers intend the physical risks of the job as a means to the end of higher pay. If workers could reasonably have another motive for taking a dangerous job over safer alternatives (as in *Emergency Delivery*), workers may or may not intend the physical risks as a means to higher pay. They may take the dangerous job for another reason (in *Emergency Delivery*, helping sick patients) while demanding hazard pay as compensation for the risks they undergo. If this is their motivation, they foresee the risks of employment but do not intend them.

3. THE ETHICS OF HAZARD PAY

It is time to address the ethical question: When, if ever, is it wrong to offer a dangerous job? I argue that it is normally wrong to offer a dangerous job if workers who take the job would intend risk to themselves as a means to higher pay. This claim can be defended in two ways. The simpler argument begins by looking at the ethics of *taking* dangerous jobs.

The doctrine of double effect implies that it is normally unethical for people to intend physical danger to anyone, including themselves, as a means to an end. It is morally problematic for the very fact that someone is exposed to danger to be a means to someone's ends. Only a very great good can justify intending risk in this way. (Specifically, only saving lives can justify intending a risk of death as a means to an end. Only the fulfillment of a clear, determinate moral duty can justify intending a risk of injury as a means to an end.) If hazard pay is workers' only possible motive for taking a job over safer alternatives, then workers who take the job intend risk to themselves as a means to the end of higher pay. For example, since the only possible motive for the courier in *Luxury Delivery* to go on a dangerous drive is to obtain hazard pay, this courier intends to undergo physical danger—including a risk of death—as a means to an end. The doctrine of double effect implies that this is wrong unless the courier plans to use the hazard pay for a very great good, such as saving a life. By contrast, if hazard pay is not workers' only possible motive for taking a job, workers who take the job may not intend the risks of the job as a means to hazard pay. They may merely foresee the risks. For example, if the courier in *Emergency Delivery* takes the job to help patients, while demanding hazard pay as a condition of fair employment, the courier does not intend the risks of the drive. The risks of the drive are merely foreseen. So, the courier does not violate a self-regarding duty by taking the job.

This analysis of the ethics of *taking* dangerous jobs leads to a conclusion about the ethics of *offering* dangerous jobs given one further premise. It is wrong to invite people to do something if it is impossible or extremely unlikely that someone would do that thing without a wrongful motive. Thus, if it is impossible or extremely unlikely that someone would take a certain job without a wrongful motive, it is wrong to offer that job. If hazard pay is the only possible reason for a normally motivated person to take a dangerous job over other alternatives, workers who take that job typically intend for the very fact that they will undergo risk to be a means to higher pay.¹⁸ Again, this is a wrongful motive unless the worker plans to use the money for a very great good: to preserve someone's life or (if the hazard pay is for a risk of non-fatal injury) to fulfill a known and determinate moral duty. So, it is wrong for employers to offer jobs with hazard pay unless either (a) it is likely that workers will use the hazard pay for a very great good they could not otherwise secure, such as their family's survival, or (b) prospective employees have a good reason other than hazard pay to take this job instead of alternative ones. Neither condition is obtained in *Luxury Delivery*. The risks the courier undertakes include the risk of death. The couple who hires the courier has no reason to believe that the courier needs hazard pay to survive or to meet basic needs; indeed, they know that offers like theirs are

unusual and that the courier can make a living driving safer routes. The couple also has no reason to believe that the courier is likely to use the hazard pay to preserve other people's lives (e.g., by donating to famine relief). So, condition (a) is unmet. The courier has no reason other than hazard pay to drive truffles up a dangerous road. So, condition (b) is unmet. Thus, it is wrong for the vacationing couple to hire the courier to make a dangerous delivery of a luxury.

The preceding argument presupposes that people have self-regarding duties. This assumption is standard in Kantian ethical theory; the prohibition on treating one's own humanity merely as a means is part of the formula of humanity. Self-regarding virtues are also important in both the Aristotelian tradition and in utilitarianism.¹⁹ Despite strong traditions of acknowledging the existence of self-regarding duties and moral virtues, some are skeptical about them. Timmerman (2006) and Schofield (2015) have offered compelling defenses of self-regarding duties. Here, I note problems with two common reasons for doubting that there are self-regarding duties. One view is that there can be no intentional violation of a self-regarding duty, since by choosing to act, one waives the duty. This argument against self-regarding duties fails because it presupposes that all duties can be waived. This is far from obvious. An example of a duty that arguably cannot be waived is the duty not to treat anyone as a slave. Many moral philosophers, representing a wide range of theoretical positions, believe that autonomy is inalienable and that one cannot waive one's right not to be enslaved. Among the historically important figures who hold this view are Locke, Spinoza, Rousseau, Kant, and Mill (Kuflik, 1984).²⁰ Second, it would be a mistake to argue against self-regarding moral duties by appealing to concerns about paternalism. Concerns about paternalism may show that self-regarding duties should not be enforced by the state or through coercive social pressure, but they do not show that self-regarding duties do not exist.

There is a way to reach my conclusion about the ethics of offering hazard pay that does not presuppose the existence of self-regarding duties. Instead, it relies on some claims about the nature of agreements. First, when people make an agreement, the parties jointly form an intention about what the parties shall do. They jointly intend that each party to the agreement do his or her part of the agreement. For instance, if a courier agrees to deliver a package in exchange for pay, the courier and the customer jointly intend for the courier to deliver the package and for the courier to be paid. Philosophers of action have offered different analyses of joint intention. Gilbert (1993a), for instance, holds that the joint intention is the intention of a group, or "plural subject," made up of the parties to the agreement. Bratman (1993) argues that joint intentions derive from intentions of individuals; when people form a joint intention, each party individually intends the components of the joint intention. The crucial point here is that the intentions of the parties to an agreement do not merely concern their own behavior. The parties must have an intention whose content concerns both parties' behavior. We must posit the existence of intentions that concern both parties' behavior to explain the way agreements are binding: agreements give both parties obligations simultaneously, and default by any party waives or modifies the obligations of the other party (Gilbert, 1993b).

When a piece of means-ends reasoning is explicitly or implicitly part of the structure of an agreement, the parties to the agreement jointly intend that this end be achieved by that means. If both parties to an agreement know or justifiably presume (a) that the first party joins the agreement only to obtain something the second party offers, and (b) that the second party only offers this thing because of a particular aspect of the first party's performance, then the parties' joint intention includes a shared understanding that this aspect of the first party's performance is a means to obtaining what the second party offers. For instance, if a customer offers to compensate a courier for an unusual physical risk, and it is clear that the courier takes the risk solely to get this pay premium, the customer and the courier jointly intend that the courier undergo the risk as a means of getting hazard pay. The customer thus intends (jointly, with the courier) that the courier undergo risk as a means to an end. Since the customer intends that the courier undergo risk as a means to an end, the customer thereby violates the doctrine of double effect.

Matters are different if workers have good reasons other than payment to prefer a certain dangerous job to alternatives. When employers hire for such jobs, employers and workers will not have a shared understanding of workers' motives for taking them. Perhaps the workers are motivated by the hazard pay, or perhaps the workers have another motivation. If the workers are motivated by the hazard pay premium, this fact will not be common knowledge between the workers and their employer. The employer thus will not know whether the workers intend risk as a means to the end of hazard pay, or whether they instead merely foresee the physical risks of employment. The employer need not inquire whether job candidates, in fact, have a motive other than hazard pay; they cannot expect a sincere answer to an interview question about applicants' motives for applying. Employers will not intend that workers take risks as means to an end. It thus does not violate the doctrine of double effect for the employer to offer this dangerous job. It is also permissible for employers to offer hazard pay, so long as the wage premium is understood as fair compensation for taking a risk, not as a motive or inducement to do so.

Both arguments support the same conclusion. Though it is not always wrong for employers to pay employees to perform tasks that endanger their health, employers should not regard payment alone or payment plus consent as justifying health risks to employees. Hiring people for dangerous work—work that is dangerous enough to require a hazard-related wage premium—is ethical under only two conditions: first, when employers have good reason to believe that workers need hazard pay for some very great good (e.g., their own or their family's survival); second, when workers have reasons other than hazard pay to take a dangerous job instead of other jobs available to them. If an employer knows or should know that hazard pay is workers' only reason for taking a dangerous job over other available jobs, and if the employer has no reason to believe that hazard pay is necessary for a good great enough to justify *intended* risk, it is unethical to offer the job. The employer cannot ethically offer such a job without changing the working conditions. Either the employer must make the conditions safer—safe enough that a reasonable person could choose this job over alternatives without a receiving a wage premium—or

the employer must change the nature of the work so that it becomes reasonable to prefer the job to other work for reasons other than compensation. If neither change to a dangerous job is feasible, the employer should not hire people to do it.

4. VALUING WHAT MONEY CAN BUY

To determine precisely which dangerous jobs with hazard pay are permissible to offer, it is necessary to answer two questions. First, when are employers justified in believing that employees would likely use hazard pay for a very great good—something good enough to justify intending risk as a means to that good? Second, when is it reasonable for workers to choose dangerous work over other jobs for reasons other than hazard pay? This section and the next will address these questions in turn.

Consider first what uses of hazard pay would justify taking risks as a means to hazard pay (which would in turn be a means to a further good). Earlier, I argued that people are justified in intending risk as a means to an end only if that end is very good indeed. The Kantian rationales for the doctrine of double effect can provide more specific guidance about what goods are great enough to justify intending risk as a means to an end. The arguments imply that there is an ethically important difference between risks to life and risks to limb. People who have future-directed projects (including all people who take jobs or offer them) cannot rationally consent to certain death. People can rationally consent to the *risk* of death as a means to an end only if risking death would be a means of preventing death. So, if the very fact that someone will undergo a risk of death is a means to one's end, one acts ethically only if one's aim is to prevent death. The ethical analysis of intended risk to limb differs. People who expect to live into the future can rationally consent to serious injury or a risk of serious injury only if doing so would enable them to fulfill a duty whose requirements are known and clear. People are not justified in intending risk of injury as a means to the satisfaction of a mere desire or as a means of fulfilling a moral duty that could be fulfilled in a less dangerous way.

These standards imply that if desperate people have no available means of subsistence other than dangerous work (either because there are no other jobs or because other jobs pay less than a subsistence wage), it would not be wrong for these people to take dangerous jobs. If an employer has good reason to believe that many prospective employees face this level of desperation, it would not be wrong for them to offer dangerous jobs.²¹ How much danger is ethically permissible depends in part on prospective employees' likely other options. If prospective employees could earn a subsistence wage at jobs that are moderately risky, and if they could earn hazard pay at more dangerous jobs, employers should not offer these more dangerous jobs if hazard pay would be the only possible justification for normally-motivated people to take them. When dangerous work is the only kind of work that can be feasibly made available to certain workers, other constraints on fair employment still apply: employees must give valid consent to risks, pay must be fair, and the employer must take reasonable steps to reduce the risks.

Matters are different if most prospective workers have possible means of support other than dangerous work. The Kantian arguments imply that jobs with potentially

fatal risks require a different analysis from jobs that involve risks of non-fatal injuries only. If a job involves risk to workers' lives, and if the employer has no reason to believe that hazard pay is necessary for workers' survival or their family's survival, the goods achievable with hazard pay will not justify offering that job. It is conceptually possible for employees receiving hazard pay to use all of that hazard pay to donate to a life-saving charitable organization. But employers cannot justify offering a dangerous job with hazard pay by appealing to the theoretical possibility that employees could be die-hard effective altruists who risk their own lives as a means to saving others.

The analysis of jobs involving nonfatal risk is subtly different. Since the Kantian reason to preserve one's health is to prepare to fulfill future duties, duties that are clear and presently known can override one's moral interest in maintaining one's health. For example, parents have a duty to try to keep their children healthy. Parents could be justified in taking a job with risks of nonfatal injury, intending to take these risks as a means to obtaining hazard pay that they will then use to pay for their children's health care. That said, if a moral duty allows discretion in its interpretation—if it is an "imperfect" duty, in Kantian language—and if one can fulfill the duty without risking one's health, the duty does not justify intending risk as a means to an end. For example, parents have a general duty to promote their children's education, but there is flexibility about how this duty may be fulfilled. Parents are not required to risk their own health to put their children in the best possible schools or to pay for their children's college education. So, the fact that many employees may want to use hazard pay to improve their children's education does not justify employers in offering dangerous jobs with hazard pay.

In a developed economy with robust social welfare programs, the goods employees could achieve by spending hazard pay generally will not justify using hazard pay to induce workers to take risks. If there is a weaker social safety net, one that protects most people from dying of starvation or lack of medicine but leaves many people with unmet true needs (e.g., insufficient treatment or accommodation for disabilities), employers may be justified in offering hazard pay as an inducement to take nonfatal risks, but not as an inducement to risk death.

5. VALUING WORK

Even if the goods achievable through hazard pay do not justify offering dangerous jobs with hazard pay, hazard pay could be justified in another way. It could be a condition of fair compensation for a job workers have other reasons to choose. Consider, then, what reasonable motivations other than a wage premium someone might have for preferring a dangerous job to safer alternatives. First, one might reasonably value the work itself and find it more valuable than other available forms of work. Generally speaking, the activities it is reasonable to value for their own sakes are activities that display some sort of skill, art, virtue, or excellence. (Partly for this reason, many accounts of meaningful work maintain that development and expression of one's abilities is a central component of meaningful work. See, e.g., Beadle & Knight, 2012; Bowie, 1998). For example, athletes can reasonably value

playing a sport for its own sake. Professional athletes in dangerous sports, such as American football, could reasonably value the opportunity to be full-time athletes instead of pursuing other work.²² Likewise, climbers in the tree-care business could reasonably value having a skilled job rather than an unskilled job, or a job involving skills they value less. This justification for valuing risky work obviously does not apply to jobs that are unskilled and tedious. It also does not justify employers or employees in declining safety measures that are expensive but do not interfere with the expression of skill. This appears to be the case in the tree-care industry; the most skilled climbers work as regular employees, not as contract climbers (doing more dangerous climbs without expensive safety measures in exchange for a wage premium). As another example, suppose that mining machine operators would do the same tasks in the same way whether or not the mine has certain safety features. If these miners face a choice between higher-paying jobs in mines that lack these safety features and lower-paying jobs in mines that have these features, skill expression cannot be their reason for taking the more dangerous jobs.

A second possible good reason for choosing to engage in risky work is that the goods or services one produces contribute to other people's lives in distinctively valuable ways. Most jobs involve contributing to other people's lives in some way or other. For an interest in contributing to others' lives to justify choosing to engage in risky work rather than some other, safer occupation, one must have reason to regard the risky work as making a distinctively valuable contribution. There are broadly two ways in which one could regard work as making a distinctively valuable contribution. First, one could judge the work socially necessary, that is, one could judge that it provides something either to individuals or to society as a whole that people cannot do without. If the work is socially necessary, one can reasonably choose it because it is socially necessary. One can reasonably choose this work because of its social value even if other, equally necessary jobs are available. For example, someone who could pursue a job either as a firefighter or as a schoolteacher could reasonably choose to work as a firefighter, even though a less dangerous and equally necessary profession is available. Since every society needs food, one could reasonably choose to work in agriculture (an occupation that involves physical risks), even if safer employment is available.

Second, even if the work does not meet a true need, either for individual customers, for other beneficiaries, or for society as a whole, one could judge that the job helps people to fulfill wants that are especially important. People could have different reasonable views about what wants are especially important to help people satisfy. For example, some people might reasonably value the thrill of skydiving, want to help others experience it, and take a job as a skydiving instructor, even though there are risks involved and safer jobs are available. That said, there are many preferences it would be unreasonable to judge *especially* important to satisfy.²³ For example, it would be unreasonable to judge consumers' desire for status symbols to be a substantially more important desire to satisfy than other needs and desires consumers have. More generally, it is unreasonable to judge mere preferences to be more important to satisfy than true needs. Thus, in a society with substantial wealth inequality, it is unreasonable to judge the mere preferences of the rich to be more important to satisfy

than the true needs of the less well-off. If the rich can pay more for the satisfaction of their whims than the poor can pay for the satisfaction of their needs, one could, of course, value being paid more. But it would be unreasonable to think the desires of the rich more worthy objects of one's altruism.

So, there are good reasons for people to take hazardous jobs other than hazard pay. Nonetheless, there are some hazardous jobs one cannot reasonably take for the sake of anything other than payment. These include jobs that consist entirely of tedious, low-skill activities and that do not help to meet essential individual or social needs or especially important wants (except for the workers' need for wages). Also included are skilled jobs that do not help to meet essential needs or especially important wants when safer jobs requiring comparable skills are available. If there is no reasonable motive other than a wage premium for a worker to take a dangerous job instead of a safer job, there will normally be a shared understanding between employer and employee that the worker is taking a physical risk as a means to higher pay.²⁴ Risk to the worker is not merely a foreseeable consequence of the worker's labor; risk is itself a means to the hazard-related wage premium. Since neither employees nor employers should normally intend for employees to take risks as a means to the end of higher pay (unless it is a means to a great good, as described in section four), employers should not offer jobs that employees could reasonably take only for the sake of higher pay. If an employer needs low-skill workers to produce a product that only satisfies an ordinary want—not a true human need or a want that could reasonably be regarded as especially important—the employer should ensure that the job is safe enough that no wage premium is needed to recruit workers. If the job cannot be made safe enough to require no wage premium, managers should not attempt to hire for it. The same goes for hazardous skilled jobs when comparably skilled, safer jobs are available in the same labor market.

For parallel reasons, employers should limit risks to workers in jobs that involve either the production of socially important goods or forms of skill expression not available in other jobs. Sometimes, there is more than one way of doing a job, one of which is both more dangerous and less costly.²⁵ Compared with the expense of taking safety measures, it is cheaper to pay workers more as an inducement to perform the work in the more dangerous way. Unless employees have some reason other than pay to prefer the more dangerous method, if they agree to the more dangerous method in exchange for higher pay, they take a risk as a means to the wage premium. Consider contract climbers again. People could reasonably choose to work as climbers in the tree-care industry instead of some other, safer form of work for reasons other than pay. Professional tree climbing is skilled work. But there is no reason other than higher pay to prefer very dangerous contract climbing assignments to less dangerous climbing jobs in which proper safety measures have been taken. An ethical tree-care company does not attempt to cut costs by hiring contract climbers at a wage premium to get jobs done more cheaply and more dangerously. The ethical thing to do is to pay for the safety measures necessary to make a wage premium unnecessary.

What is true in the tree-care industry is also true in the mines, on fishing boats, and on the factory floor. Employers cannot justify omitting expensive safety measures by

paying employees a higher wage. This does not mean that employers must make every job perfectly safe; that is not possible. It means that if a job has an elevated risk level compared with other jobs prospective employees could take—including jobs performing similar tasks—employers may not rely on a wage premium to recruit workers. Either they must find ways to reduce the risk level, or they must make the work itself better (e.g., by making it more skilled) so that workers have a good reason other than pay to take the more dangerous work. Only then will the elevated risk of the job be merely a foreseen consequence of the job and not a means to the end of higher pay.

6. IMPLICATIONS

This argument supports two ethical constraints on the conduct of business that have not been acknowledged in the existing business ethics literature. The first is that the permissibility of hiring people to do dangerous work depends in part on the content and social function of the job. It is typically unethical to offer a dangerous job that workers could not reasonably choose over other, safer available jobs for reasons other than pay. Pay is the only good reason to take a job that satisfies ordinary consumer preferences (not true individual or collective needs or especially important wants) and that does not express workers' skills better than other available jobs. If jobs fitting this description are dangerous, they should be made safe or should not be offered. The only exception arises in economic circumstances in which many prospective workers cannot meet their or their family's basic needs without hazard pay. Where the risks of a job are potentially fatal, this exception is limited to economic circumstances in which people need hazard pay to survive.

As a hypothetical example, suppose that a certain gemstone is prized only for its prestige-enhancing value: people want it only because it improves their social status. The market for the gem is grounded in vanity. Suppose that the people who are qualified to take a certain job in this gemstone mine are also qualified to work in other, safer jobs in the area, and that these safer jobs require similar skills. Suppose that these workers could meet their basic needs and their families' basic needs in these lower-paying, safer jobs. Suppose finally that the managers of the gemstone mine cannot institute safety features that would make it possible to recruit workers without either paying a hazard-related wage premium or deceiving workers about the extent of the dangers. Then workers who take the mining jobs would be taking risks as means to higher pay. Under these circumstances, the gemstone mine cannot ethically hire. It must leave the jobs unfilled until there is a way of making the work safer. The mining company may thus be ethically required to leave valuable gemstones in the ground.

Though safety considerations may require businesses to refrain from mining (literal or metaphorical) gemstones, worker safety does not require socially essential but inherently dangerous industries, such as logging, fishing, agriculture, and transportation, to shut down. A second, less demanding requirement applies to these industries, and to all businesses that hire people to do physically risky work. This requirement is more precise than the common observation that employers have moral responsibilities with respect to workplace safety. If there is more than one way to complete a task, and some ways are more dangerous, employers cannot justify

omitting an expensive safety measure by paying workers more. Employers may take the cost of a workplace safety measure into account in only three circumstances: first, if workers need hazard pay to meet basic needs (survival needs, if the risks of the job are potentially fatal); second, if the safety benefit of a safety measure is small enough that workers would be indifferent to its absence (and hazard pay would thus be unnecessary); third, if the cost of the safety measure is so great that a socially necessary industry could not remain economically viable after adopting it.²⁶

This proposal is by no means a radical standard in the American context. The Occupational Safety and Health Act uses a “feasibility” standard that demands more rigorous workplace safety standards than an economic cost-benefit analysis would require (Keating, 2003). My argument implies that there are independent ethical grounds to do what the law in the United States and many other developed countries requires.²⁷ As an example of what both ethics and American law require, consider the standards of safety in the cotton industry.²⁸ Prolonged exposure to cotton dust can cause byssinosis, known as “brown lung disease” in its late stages. The disease has emphysema-like symptoms and can put stresses on the heart that lead to an early death. It is not possible to conduct industrial cotton weaving without exposing workers to some amount of cotton dust. The safety standard I advocate does not require cotton producers to cease their operations, since clothing (arguably including cotton clothing, given its prevalence) is a socially necessary good. Various measures to reduce workers’ cotton dust exposure are technologically available and economically feasible in the sense that the industry could adopt them without going out of business. Some of these measures are more effective and also more costly. My argument implies that cotton producers cannot justify omitting the more expensive of the feasible methods by paying workers more. This ethical conclusion aligns with the regulatory decision to require cotton producers to meet a higher safety standard than the standard producers deem “cost-effective.”

My argument has more demanding implications in low- and middle-income countries with weak or no workplace safety laws. To take just one example, asbestos continues to be used in construction in many developing countries (WHO, 2014). The measures needed to protect construction workers from asbestos exposure, and the associated lung cancer risk, are expensive. Many construction companies in developing countries judge it cost-effective to omit these safety measures, sometimes choosing to accept fines rather than pay for good safety practices (Kazan-Allen, 2005). It is likely that in many labor markets, workers who are fully informed about the risk of asbestos exposure would demand a higher wage in jobs lacking these asbestos safety measures, and that these workers could feed their families without the wage premium. If that is the case, construction companies doing socially necessary projects ethically must take the expensive asbestos safety measures if there is any way to proceed with the construction with safety measures in place. Construction companies engaged in luxury construction ethically must take these safety measures or shut down. Safety measures are morally required even if they are not legally required and even if a company would save money by omitting the safety measures and paying workers more. Paying workers to accept a lower standard of safety would be using them merely as means.

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NOTES

1. Not all employers disclose risks (Shrader-Frechette, 2002).
2. This claim is concerned exclusively with the moral question of what jobs employers should offer and what job offers they should refrain from making. I will not address the regulatory question of whether the employment offers I identify as wrongful should be illegal.
3. This claim is inspired by a position widely asserted in bioethics about paying human research subjects for their participation in net-risk research. This position holds that informed consent, fair pay, and risk minimization are not jointly sufficient to justify exposing human subjects to health risks; there must also be either a prospect of social benefit from research or a prospect of direct medical benefit to subjects (CIOMS, 2016: 9; Emanuel, Wendler, & Grady, 2000: 2705; Wendler & Rid, 2017). Wertheimer (2013; 2015) criticizes the asserted social value requirement, partly on the grounds that it differs from accepted practice in industrial employment. I agree with Wertheimer that the ethical principles about paying people to take health risks should be the same in medical research and in business, but I argue that the proper standard in business is higher than generally appreciated. For defenses of the social value requirement in medical research, see Wendler and Rid (2017).
4. Interview with certified arborist Dan O'Donnell, December 11, 2017. Tree-care companies do not assign their regularly employed climbers to these tasks both because the employees are unwilling to attempt these tasks and because the companies are reluctant to expose their (highly skilled) employees to the risk. Contract climbers receive a wage premium partly because of the elevated risk and partly because contract work does not come with benefits.
5. Nelkin and Rickless (2014) also offer a Kantian defense of a form of the doctrine of double effect, drawing on the formula of humanity. The version of the doctrine they defend is not its traditional form, but the revised version that is defended in Quinn (1989). This revised doctrine differs from the version I use in two respects. First, instead of distinguishing between intended and foreseen harm, Quinn's doctrine distinguishes between harm via "direct agency" (which can include passive harm) and harm via "indirect agency." Second, Quinn's revised doctrine only applies to other-regarding harms that are done without the consent of the person affected. It is unclear why Nelkin and Rickless accept this limitation on the doctrine's application.
6. This does not necessarily mean that an unintended but foreseen harmful effect may be justified by a purely consequentialist calculation. The nonconsequentialist doctrine of doing and allowing is orthogonal to the doctrine of double effect. Some versions of the doctrine of double effect, such as the formulations Velazquez and Brady (1997: 95–97) and Masek (2000) use in their discussions of the ethics of marketing dangerous products, include more detail about when merely foreseen harms are justified. To minimize reliance on controversial premises, I use a formulation that does not specify a method for assessing merely foreseen harms.
7. There is a difficulty in applying the traditional doctrine of double effect to cases in which an agent might perform the same harmful action either intending harm or merely foreseeing harm. For example, sometimes a military commander could bomb a certain location *either* with the aim of destroying a munitions

plant *or* with the aim of terrorizing the civilian population. Does the doctrine of double effect imply that the permissibility of the bombing depends on what motive the commander had when ordering it? Rachels (1994), Thomson (1999), and Scanlon (2008) think this implication implausible. One possible response is to adopt the Kantian conception of permissibility: an act is impermissible if there is no motive for it (or no “maxim” speaking in favor of it) that is not wrongful (Kant, 1996 [1785]: Ak. 4:439). If a harmful action could plausibly be motivated only by a malicious intention or by a wrongful intention to do harm as a means to some further end, the action is impermissible. If an action could have a permissible motive in which harm is foreseen but not intended, but the agent’s actual motive involves wrongfully intending the harm maliciously or as a means to an end, then action is not impermissible, but the agent chooses badly. For discussion of other responses to this challenge, see Fitzpatrick (2012).

8. See Fitzpatrick (2012) for discussion of prominent lines of objection.

9. This qualified claim about the rationality of consenting to death is silent about what people should do if they either have no temporally extended projects (e.g., because of an end-stage terminal illness) or if they are able and willing to abandon all temporally extended projects. It is thus silent about whether it is rational for the terminally ill to consent to active euthanasia or to decline medical treatment they regard as futile.

10. A second, perhaps more contentious argument derives from Kant’s argument in the *Groundwork* that rational agency is the one end that is rationally obligatory for all persons. The argument’s first key claim is that practical reasoning about final ends is possible and that some end or other is, in fact, rationally obligatory for all persons (Kant, 1996 [1785]: 94–108, Ak. 4:446–4:463). The second key claim is that a rationally obligatory end must derive its normative force either from reason itself or from inclinations. (This claim presumably derives from reasons internalism, the view that reasons for action must be potentially motivating.) But our inclinations vary, so inclination cannot be a source of a universally obligatory end. If there is an obligatory end, reason alone and not inclination must be its source. The only end reason could select as an end independent of the influence of inclination is rational agency itself (Kant, 1996 [1785]: 77–80, Ak. 4:426–30). If this is right, then rational agency is itself a rationally obligatory end, and to endorse the destruction of one’s own rational agency would be irrational.

11. Others include physical liberty and broadly applicable skills. Kant argues in the *Groundwork* that people ought to cultivate broadly applicable skills to fulfill future duties. (Kant, 1996 [1785]: 74, 80–81, Ak. 4:423, 430). For discussion of physical liberty as an all-purpose means, see Hughes (2018).

12. This does not mean that one must maximize the resources one has available for future action. It is impossible to do that, since there is no single measure of the resources available for action, and cultivating any of them involves trade-offs.

13. Kantian ethicists differ about how to interpret the formula of universal law. Here I follow the interpretation offered in Herman (1989), which focuses on the evaluation of maxims involving bodily harm. Herman’s analysis does not directly address the question whether Kantians should endorse the doctrine of double effect.

14. The agent also cannot consistently endorse others accepting this maxim if others accepting the maxim would frustrate the agent’s end in acting on it.

15. We should not be indifferent to merely foreseen harm. Kantian ethics acknowledges this. The structure of a Kantian argument not to be indifferent to causing harm would parallel the structure of the more familiar Kantian arguments not to be indifferent to opportunities to prevent harm. Though there is an ethical reason to avoid causing foreseen harm, there could not be an absolute prohibition on acting in ways that could or will lead to harm. Sometimes it is impossible to act in a way that will not have harmful effects.

16. Even a Kantian can agree that a sufficiently large increase in aggregate welfare justifies small harms or small risks of harm when the harm or the risk of harm is only foreseen and not intended. If every person harmed or exposed to risk had a right to compensation, however slight the risk or harm, the implications of this right for environmental ethics would be radical. It would imply, for instance, that if I have a fire in my fireplace, I owe a tiny amount of compensation to each of the people who is very slightly harmed or exposed to risk because of the carbon emissions from my fireplace.

17. In many actual labor markets, workers are not well-informed about the health risks associated with the jobs available to them. See, e.g., Shrader-Frechette (2002).

18. Eccentric motivations for taking risky jobs are conceivable, but employers should not advertise jobs if only workers with eccentric motivations could ethically accept those jobs. For instance, it is conceivable

that the courier in *Luxury Delivery* could have a deep love of mountain views that are obscured by rain, snow, or fog and framed by a car's windshield. The conceptual possibility that the courier could have this unusual motivation does not justify the vacationing couple in hiring the courier to risk life and limb to deliver truffles.

19. Though Mill rejects the coercive enforcement of self-regarding duties, he explicitly endorses the existence of self-regarding moral virtues: "I am the last person to undervalue the self-regarding virtues; they are only second in importance, if even second, to the social" (Mill, 1956 [1869]: 92).

20. There is disagreement in the utilitarian tradition about whether autonomy is alienable in principle and about the related but distinct question of whether it ought to be legal to alienate one's autonomy. Mill (1956 [1869]) believed that autonomy cannot be alienated wholesale. Hare (1979) argued that there are conceivable but improbable circumstances in which slavery would be justified. Feinberg (1989: 71–81), writing in response to Mill, held that the main reason not to enforce slave contracts is that we should be extremely skeptical that purported consent to any such contract is fully informed and voluntary.

21. To use this justification for offering dangerous work, employers must have *positive reason* to believe that many applicants face this level of desperation. The mere speculation that some applicants might be in dire straits is not enough. Survival here includes long-term survival. If society is structured so that personal savings is people's only means of surviving in old age, workers may justifiably accept hazard pay (and employers may justifiably offer it) to save for *basic* needs in retirement.

22. It is unclear whether football players in fact receive implicit hazard pay as compensation for the risks they undergo.

23. If a consumer preference is valuable to satisfy, workers with strong personal ties to the industry (e.g., a family tradition of working in that industry) could reasonably judge it especially valuable for *them* to help satisfy this preference. This motivation for doing hazardous work is reasonable only if the consumer preferences that the work helps to satisfy are good for workers to satisfy, for reasons other than wages. Wages are the only reason for workers who are unjustly badly off to provide luxuries to those who are unjustly well-off and who could not afford those luxuries if the distribution of wealth were just. Tradition does not give workers reason to take dangerous jobs providing such luxuries. As Cohen nicely points out, there is no value in sustaining an unjust tradition (2013: 172).

24. The exceptions are cases in which employers have credible evidence that employees have an unreasonable motive for preferring this job to others.

25. I assume here that the safer method is feasible in the sense that the industry could adopt the safer method and remain in operation. If a safety measure is so expensive that the industry could not implement it, doing the job in question with this safety measure is not an option.

26. If a safety measure is so expensive that a socially necessary industry could not continue to operate after adopting it, employers who omit this safety measure and offer hazard pay to workers need not see this hazard pay as an inducement. They and their workers may justifiably see it as a condition of fair employment for a socially necessary job that cannot be made safer.

27. Serious workplace safety issues exist despite this law. Waldman and Mehrotra (2017) report multiple recent incidents of sanitation workers in American poultry processing plants being seriously injured while cleaning machinery that was not fully powered down.

28. Regulations requiring more rigorous safety standards than those the industry deemed "cost-effective" were challenged and upheld by the US Supreme Court. *Am. Textile Mfrs. Inst. v. Donovan*, 452 US 490 (1981). These regulations remain in effect. 29 CFR 1910.1043. For the facts of the disease, see *AFL-CIO v. Marshall*, 617 F.2d 636 (D.C. Cir. 1979).

REFERENCES

- Arnold, D. 2009. Working conditions: safety and sweatshops. In G. G. Brenkert & T. L. Beauchamp (Eds.), *The Oxford handbook of business ethics*: 628–54. Oxford: Oxford University Press.
- Arnold, D., & Bowie, N. 2003. Sweatshops and respect for persons. *Business Ethics Quarterly*, 13: 221–42.
- Beadle, R., & Knight, K. 2012. Virtue and meaningful work. *Business Ethics Quarterly*, 22: 433–50.

- Bowie, N. E. 1998. A Kantian theory of meaningful work. *Journal of Business Ethics*, 17: 1083–92.
- Bowie, N. E. 1999. *Business ethics: A Kantian perspective*. Malden, MA: Blackwell.
- Bratman, M. E. 1993. Shared intention. *Ethics*, 104: 97–113.
- Cohen, G.A. 2013. Rescuing conservatism: A defense of existing value (All Souls version). In M. Otsuka (Ed.), *Finding oneself in the other*: 143–74. Princeton, NJ: Princeton University Press.
- Council for International Organizations of Medical Sciences (CIOMS). 2016. *International ethical guidelines for health-related research involving humans*. <https://cioms.ch/wp-content/uploads/2017/01/WEB-CIOMS-EthicalGuidelines.pdf>.
- Emanuel, E., Wendler, D., & Grady, C. 2000. What makes clinical research ethical? *JAMA*, 283: 2701–11.
- Feinberg, J. 1989. *Harm to self*. Oxford: Oxford University Press.
- Fitzpatrick, W. 2012. The doctrine of double effect: Intention and permissibility. *Philosophy Compass*, 7: 183–96.
- Gilbert, M. 1993a. Agreements, coercion, and obligation. *Ethics*, 103: 679–706.
- Gilbert, M. 1993b. Is an agreement an exchange of promises? *Journal of Philosophy*, 90: 627–49.
- Hare, R. M. 1979. What is wrong with slavery? *Philosophy & Public Affairs*, 8: 103–21.
- Herman, B. 1989. Murder and mayhem. *The Monist*, 72: 411–31.
- Hill, T. 1980. Humanity as an end in itself. *Ethics*, 91: 84–99.
- Hughes, R. 2018. Imprisonment and the right to freedom of movement. In C. W. Surprenant (Ed.), *Rethinking punishment in the era of mass incarceration*: 89–104. New York: Routledge.
- Kazan-Allen, L. 2005. Asbestos and mesothelioma: Worldwide trends. *Lung Cancer*, 49(Supp. 1): S3–S8.
- Kant, I. 1996 [1785]. *Groundwork of the metaphysics of morals*. In *Practical philosophy*, translated by M. J. Gregor. Cambridge, United Kingdom: Cambridge University Press.
- Keating, G. 2003. Pressing precaution beyond the point of cost-justification. *Vanderbilt Law Review*, 56: 653–748.
- Korsgaard, C. 1998. *Creating the kingdom of ends*. Cambridge, United Kingdom: Cambridge University Press.
- Kuflik, A. 1984. The inalienability of autonomy. *Philosophy & Public Affairs*, 13: 271–98.
- Masek, L. 2000. The doctrine of double effect, deadly drugs, and business ethics. *Business Ethics Quarterly*, 10: 483–95.
- Meyers, C. 2004. Wrongful beneficence: Exploitation and third world sweatshops. *Journal of Social Philosophy*, 35: 319–33.
- Mill, J. S. 1956 [1869]. *On liberty*. Indianapolis: Bobbs-Merrill.
- Nagel, T. 1986. *The view from nowhere*. Oxford: Oxford University Press.
- Nelkin, D. K., & Rickless, S. C. 2014. Three cheers for the doctrine of double effect. *Philosophy and Phenomenological Research*, 89: 125–58.
- Powell, B., & Zwolinski, M. 2012. The ethical and economic case against sweatshop labor: A critical assessment. *Journal of Business Ethics*, 107: 449–72.
- Preiss, J. 2014. Global labor justice and the limits of economic analysis. *Business Ethics Quarterly*, 2014: 55–83.
- Quinn, W. 1989. Actions, intentions, and consequences: The doctrine of double effect. *Philosophy & Public Affairs*, 18: 23–40.

- Rachels, J. 1994. More impertinent distinctions and a defense of active euthanasia. In B. Steinbock and A. Norcross (Eds.), *Killing and letting die* (2nd ed.): 139–54. New York: Fordham University Press.
- Robinson, J. C. 1986. Hazard pay in unsafe jobs: Theory, evidence, and policy implications. *The Milbank Quarterly*, 64: 650–77.
- Scanlon, T. M. 2008. *Moral dimensions: Permissibility, meaning, blame*. Cambridge, MA: Harvard University Press.
- Scharding, T. 2015. Imprudence and immorality: A Kantian approach to the ethics of financial risk. *Business Ethics Quarterly*, 25: 243–65.
- Schofield, P. 2015. On the existence of duties to the self (and their significance for moral philosophy). *Philosophy and Phenomenological Research*, 90: 505–28.
- Shrader-Frechette, K. 2002. Risky business: Nuclear workers, ethics, and the market-efficiency argument. *Ethics and the Environment*, 7: 1–23.
- Smith, A. 1999 [1776]. *The wealth of nations*, edited by A. Skinner. London: Penguin Books.
- Smith, J., & Dubbink, W. 2011. Understanding the role of moral principles in business ethics: A Kantian perspective. *Business Ethics Quarterly*, 21: 205–31.
- Thomson, J. J. 1999. Physician–assisted suicide: Two moral arguments. *Ethics*, 109: 97–518.
- Timmerman, J. 2006. Kantian duties to the self, explained and defended. *Philosophy*, 81: 505–30.
- Velazquez, M., & Brady, F. N. 1997. Natural law and business ethics. *Business Ethics Quarterly*, 7: 83–107.
- Viscusi, W. K., & Aldy, J. E. 2003. The value of a statistical life: a critical review of market estimates throughout the world. *Journal of Risk and Uncertainty*, 27: 5–76.
- Waldman, P., & Mehrotra, K. 2017. America’s worst graveyard shift is grinding up workers. *Bloomberg*, December 29, 2017. <https://www.bloomberg.com/news/features/2017-12-29/america-s-worst-graveyard-shift-is-grinding-up-workers>.
- Wedgwood, R. 2011. Defending double effect. *Ratio*, 24: 384–401.
- Wendler, D., & Rid, A. 2017. In defense of a social value requirement for clinical research. *Bioethics*, 31: 77–86.
- Wertheimer, A. 1999. *Exploitation*. Princeton, NJ: Princeton University Press.
- Wertheimer, A. 2013. Is payment a benefit? *Bioethics*, 27: 105–16.
- Wertheimer, A. 2015. The social value requirement reconsidered. *Bioethics*, 29: 301–08.
- World Health Organization (WHO). 2014. *Elimination of asbestos-related diseases*. March 2014. http://www.who.int/ipcs/assessment/public_health/Elimination_asbestos-related_diseases_EN.pdf.