# The Construction of Rights

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*This paper examines the sense in which rights can be said to exist. We examine various approaches to the definition and analysis of rights, focusing in particular on the compossibility of rights. Concentrating on three existing approaches to rights—social choice-theoretic, game-theoretic, and Steiner's approach—we suggest that rights are noncompossible in any interesting sense, that is, that the rights people have are nonexistent or vanishingly small. We develop an alternative account of rights—which we claim is more in tune with moral intuitions—where compossibility is not important and rights cannot form the exclusive basis of morality or a theory of justice. Rights are constructed on the basis of more fundamental moral values. We demonstrate how they are constructed and the sense in which they exist even though they might not always be exercised, while acknowledging that rights that may never be exercised are hardly worth the name.*

In what sense, if any, do rights exist? If rights are instantiated in law but difficult to exercise in practice, do people really have those rights? Can we compare across countries to see what rights people have both materially and formally? In this paper we map out the senses in which rights can be said to have existence. We suggest a framework for analyzing how rights might be measured and compared. The framework is supposed to be relatively neutral between competing conceptions of rights, though we do argue that rights cannot form the basis of morality or a system of justice. They are not foundational since no system of rights worth the name can be "co-possible" (Nozick 1974) or, more precisely, "compossible" (Steiner 1994). A system of rights is compossible to the extent that all persons can exercise their right and there will be no conflicting duties. In other words, we suggest that there are no principles of justice that can deliver a set of rights that do not contain contradictory judgments about the permissibility of actions. There will always be occasions when people cannot exercise their rights simultaneously.

Contrary to what some have argued, it does not follow that at least one person does not have a right to do *x* simply because two people cannot exercise a right to do *x* simultaneously. Having a right does not entail being able to exercise it. Nevertheless, if rights cannot be exercised, then they hardly seem worth the name. Did Zimbabweans really have the right to vote in the Presidential elections of March 9 and 10, 2002? That election demonstrated how easy it is to disenfranchise voters simply by taking so long to check names against the list of registered voters, while voters are just as effectively disenfranchised by intimidation, whether organized by the state, by political parties, or by wandering thugs. U.S. citizens have the right to vote, but first they must register and there must be polling stations that recognize that registration and are open long enough for registered voters to cast their ballot. Some voters claimed that they were disenfranchised at the U.S. Presidential election in 2000, as polling officers would not accept their registration details. The ease of registration differs across U.S. states and more so across the world, while the costs of voting also differ. At what level of difficulty and cost can we say that citizens effectively lose the right to vote? At what level of health care or educational opportunity do people have rights to education or health care? Can we expect poor nations to provide the same level of rights as rich nations? How might we weight and compare rights across countries? These are not easy questions to answer but we try to provide a framework through which such questions may be addressed.

This paper is concerned with judging in what sense people have rights. It provides a framework by which we can judge to what extent rights exist and to what extent they can be exercised. While no framework could be normatively neutral, our framework can encompass different substantive rights theories. We begin by examining the noncompossibility of rights, demonstrating formally that rights are not compossible or, to the extent that they are, they are not the rights about which we ordinarily write and speak. According to Steiner (1994, 2–3), the compossibility of a set of rights is a necessary condition for the plausibility of any theory of justice that yields that set. Nevertheless, rights and liberty are fundamental to liberalism, and clashes of rights are (part of) what politics is all about (see Primus 1999 for an historical account of such clashes and changing rights talk in American history; see also Wellman 1998). The fact that rights clash, and that at times my right to free speech may need to be curtailed by your right to privacy, or my right of free speech is curtailed by your right of free speech, does not mean that we do not have such rights. But in what sense do we have them?

Rawls (1971, 1982) argues that as long as our rights in these regards are approximately equal, then we have

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a just liberal system. He says that as long as the "central range of application" of basic liberties is provided for, the principles of justice are fulfilled. The basic liberties for Rawls are specified by institutional rules and duties that form a framework of legally protected paths and opportunities. As he recognizes, of course, differential material or educational means entail that not everyone may exercise their rights equally. Rawls introduces the idea of the "worth" of liberty to suggest how useful to people these rights are given the probability that they can exercise them. For many, however, if someone has no chance of exercising a right, then the right is barely worth the name. We do not try to adjudicate this particular issue here. Rather we provide a framework for defining rights of different sorts—what we call the existence conditions of rights—and then suggest a way of handling whether or not we should judge that those rights can be said to exist in the forms we define for a given individual, a group, or society as whole. Such judgments are made relative to the expectations we may have for exercising rights given the social and economic circumstances of different societies. We specify the sense in which someone can be said to have a right (the senses in which a right can exist) and then the probability that someone can exercise the right. In doing so we specify in a fashion broadly compatible with Rawls's (1982) discussion how to identify worthwhile rights and do so relative to different circumstances. Although rights can and should play an important role in the theory of justice, they cannot form the basis of a theory of justic. Rights are essentially constructed.

The extent to which rights exist is not all-or-nothing when it comes to respecting or exercising those rights. People have rights even when they cannot exercise them. First, they may have them formally, when they do not have them materially. Second, people may have rights materially even though they cannot always exercise them. Having a right entails some expectation that it might be realized, but it does not ensure it. We believe that this way of representing rights both makes sense formally and is more in tune with everyday moral language than other formal accounts of rights discussed here. First, however, we argue that the allure of rights compossibility should be avoided.

## THE NONCOMPOSSIBILITY OF SEN RIGHTS

Rights may seem obviously noncompossible. The most striking examples are entitlements, though rights in any form are not manifestly compossible. For example, if I claim a right to free speech and you claim a right not to be subject to abuse, something must give way if I want to abuse you verbally. Of course, we may need to sort out whether my right to free speech includes the right to say the precise words I intend, and whether your right not to be abused is covered by those words. However, typically rights do conflict in these sorts of ways.

We can trivially make rights compossible by creating a dictator who can assign rights as she sees fit to ensure that no rights ever conflict. (In Steiner [1994] such a dictator is called the Adjudicator.) She could be careful and assign type rights so that no conflict occurs—the easiest way would be to assign all rights to herself and none to others. Or she could decide the assignation of a right *after* a conflict between two sets of the putative rights has been claimed.[1] Juridical decisions do decide which rights are to be restricted or which given greatest weight in any conflict, and they might be said to be part of a construction toward a formally compossible rights set. However, any formally specified rights set worth the name is not able to deliver a compossible set of rights without such an "external" adjudication: external, that is, to the rights set as understood to be in conflict (Steiner 1998, 265ff). Furthermore, in practice any external adjudication is likely to involve considerations that are not strictly rights-based (as the discussion of cases in Wellman 1995, chap. 7 shows). To overcome the triviality of such a set of compossible rights, formal theorists normally assign a set of reasonable conditions and then see whether conflicts emerge. For example, we can see a simple proof of the noncompossibility of rights in terms of Amartya Sen's account of minimal liberalism.[2]

One way of representing Sen is to view society as a social decision function, that is, as a function $F$ that defines possible combinations of individual preference orderings $R_1, \ldots, R_n$ to a "social preference" $R = F(R_1, \ldots, R_n)$.[3] Whatever the feasibility constraints on the alternatives open to society, $F$ provides the answer to the question of what is best for society by generating the social preference relation $R$. For any situation the best social state relative to $R$ is chosen from the set of feasible social states. Obviously, it is thereby assumed that the social preference relation always contains a best element.[4]

Sen defines a condition of minimal liberalism ($ML$), suggesting that it is a necessary but not a sufficient condition for rights holding. $ML$ states that there are at least two individuals such that for each of them there is at least one pair of alternatives over which each is *decisive*. An individual is decisive over a pair of social states $(x, y)$ if it is always the case that if the person strictly

[1] We say more about this issue below.

[2] The term "right" is used in the broadest sense in this essay. We examine the compossibility and existence of rights as they are discussed in both philosophical and everyday moral discourse. Thus the "right to free speech" here may be seen as a liberty to speak on various topics, an immunity against being divested of that liberty, and rights against certain types of interference with that liberty. Similarly, the Sen rights specified in his example of the right to read a book seemingly require, at least, a liberty- and a property-right. The copossible rights Nozick (1974, 166) refers to must be both. We do not attempt to sort out these issues conceptually in this paper; rather we deliberately use the term "right" somewhat loosely but claim that our analysis can be applied easily to a more technical Hohfeldian analysis of rights, entitlements, privileges, liberties, and so on. In places we suggest how that application to other Hohfeldian categories may be accomplished. Especially clear statements of a Hohfeldian position are given in Kramer (1998, 2001).

[3] $R$ describes the weak preference relation ("at least as good as"). From $R$ the strict preference relation $P$ ("better than") and the indifference relation $I$ ("equally as good as") are derived in the usual way.

[4] This implies that the social preference relation needs to be acyclic and complete.



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prefers $x$ to $y$, then society should strictly prefer $x$ to $y$, and conversely, if that person strictly prefers $y$ to $x$, then society should strictly prefer $y$ to $x$. The condition of minimal liberalism, *ML*, thus states, there are individuals $i$ and $j$ and distinct pairs of alternatives $(x, y)$ and $(z, v)$ such that $[yP_ix \rightarrow yPx$ and $xP_iy \rightarrow xPy]$ and $[zP_jv \rightarrow zPv$ and $vP_jz \rightarrow vPz]$.

Sen's liberal paradox states that condition *ML* cannot be satisfied simultaneously with the (weak) Pareto condition (*PAR*) and the condition of universal domain (*UD*). According to the Pareto condition a strict preference that is shared by all individuals should also be represented in the social preference relation: If all individuals strictly prefer some alternative $x$ to some other alternative $y$, then society should also strictly prefer $x$ to $y$. The condition of universal domain demands that a social preference relation is generated for any logically possible configuration of individual orderings: No individual preference orderings are excluded *a priori*.

The incompatibility of the three conditions is easy to demonstrate. Take the simple case in which there are only three alternatives, $x$, $y$, and $z$, and two individuals. Assume that the two individuals, $i$ and $j$, have rights over $x$ and $y$ and over $y$ and $z$, respectively. Given *UD*, suppose that individual $i$ strictly prefers $y$ to $x$ and $x$ to $z$, while $j$ strictly prefers $x$ to $z$ and $z$ to $y$. We then see that $i$'s rights over $x$ and $y$ imply $yPx$ and that $j$'s rights over $y$ and $z$ imply $zPy$. The Pareto principle yields $xPz$, which means that we have $xPzPyPx$: The social preference relation is cyclic and hence does not contain a best alternative.

Sen's results show that, under the conditions *UD* and *PAR*, a person's decisiveness over one pair of alternatives is incompatible with other persons having any rights at all. To see rights in terms of decisiveness over pairs of alternatives means that, in a very strong sense, individual rights are incompatible. However, the incompatibility of Sen rights follows only if the social decision function satisfies *UD* and *PAR*. It can easily be shown that if one of these conditions is dropped, compossibility remains possible. Indeed, much of the early literature directly following Sen's theorem consisted of the derivation of such possibility results arising from relaxing the conditions (see Wriglesworth 1985 for an overview). To what extent can such relaxations be seen as showing the compossibility of rights?

A relaxation of *UD*, that is, a restriction of the domain of the social decision function, can be interpreted in two ways. First, it could be used normatively. It has, for instance, been shown that the liberal paradox arises in cases in which individuals are "meddlesome," and it has been argued that rights should not protect "meddlesomeness" (Blau 1975). We could ban "deviant preference profiles" from the social decision mechanism (Goodin 1986). Alternatively, rather than abandoning *UD*, a weaker notion of decisiveness could be used—a person's strict preference regarding a pair of alternatives over which he/she has a right should be reflected in the social preference relation only if the person is nonmeddlesome. It is not the place here to assess the normative appeal of abandoning *UD* or of using domain information to weaken the definition of rights. However, such approaches are rather *ad hoc*. Defining meddlesome preferences is not straightforward. To call them "meddlesome" already labels them as "wrong," but we might call some of them "caring preferences" or, more neutrally, "other-regarding." Most of us want our loved ones to care about us, even if this means that they have preferences regarding our well-being that differ from our own. Abandoning *UD* may be one route out of Sen's paradox, but it is a route with almost as many problems as the theorem itself.

Second, a relaxing of *UD* can be justified ontologically. In this view, the domain can be restricted because the situations in which conflicts between rights occur do not "really" belong to the realm of the possible. The restricted domain is thought to describe more correctly the set of possible worlds: Some configurations of individual preference orderings may, for instance, be psychologically impossible and may therefore never be realized, and conflicts in those psychologically impossible worlds need not bother us. Such an approach ensures rights compossibility by adopting an alternative interpretation of the notion of possible worlds; it does not deny that under a *logical* interpretation of that notion, Sen's liberal paradox establishes the noncompossibility of rights. More importantly, however, the claim that the preference profiles that lead to problems may be logically possible but may be impossible by some other criterion simply cannot be sustained. There is, for instance, nothing odd about Sen's original illustration of the paradox—the Prude and the Lewd having to decide whether to read or not to read a copy of *Lady Chatterly's Lover*. Whatever one's metaphysical opinions regarding the notion of "possibility" are, that situation certainly seems possible.

What about relaxing the Pareto condition? Can that secure the compossibility of Sen rights? Such a relaxation is Sen's (1982) suggestion. In his view, *ML* is more important than *PAR* and the latter therefore has to yield. However, the Pareto condition itself describes certain rights, to wit, the rights of society. After all, the Pareto condition states that the group of all individuals is decisive for any pair of alternatives. Hence, we cannot really say, as we did above, that Sen's result only established the noncompossibility of rights *given* a social decision mechanism satisfying *UD* and *PAR*. Instead, we should say that, given *UD*, the result establishes the noncompossibility of individual and certain *group rights* (see in this respect Steven and Foster's [1978] extension to conflicts between group rights; see also Gekker 1985).

It could be argued that a theory of justice need not attach much importance to the group rights exemplified by *PAR*, and so the result merely shows that *some* allocations of rights are noncompossible. And, indeed, Sen's arguments for a relaxation of the Pareto condition could be interpreted as a powerful defense of such a position. However, even without group rights, there is a serious compossibility problem with Sen rights. Alan Gibbard (1974) posed the problem, in what is known as Gibbard's liberal paradox. He showed that with a slight formal strengthening of *ML*, compatible with the spirit of Sen's defense of *ML*, impossibility results arise

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even when the Pareto condition is dropped altogether. The condition *ML* does not specify over which pairs of alternatives an individual is decisive—it states only that at least two individuals are decisive over some pairs. In his various examples, however, Sen assumes that individuals are decisive over those pairs of alternatives that differ only with respect to some aspect pertaining to that individual's life. Gibbard's strengthening of *ML* essentially comes down to this same assumption. Assume that each alternative can be described as a vector of features or characteristics and let, for instance, some feature—say, component *a* of the vector—stand for person *i* reading or not reading a particular book (say, *Lady's Chatterly's Lover*), whereas another feature—component *b*—describes whether *j* reads a copy of that same book. Gibbard's condition would be satisfied if *i* is decisive for any pair of alternatives that differ only with respect to *i* reading the book or not (that is, that differ only with respect to their *a*th component) and if *j* is decisive for all pairs of alternatives that differ only with respect to *j* reading the book or not (that is, that differ only with respect to their *b*th component). Gibbard subsequently shows that there is no social decision function that satisfies such a strengthened version of *ML* and also satisfies *UD*. In other words, given *UD*, *any* allocation of individual rights turns out to be noncompossible.

Many authors have suggested that the Sen approach is basically flawed. As Gibbard (1982, 597–98) himself later formulated it,

> These liberal paradoxes carry with them, then, an air of sophistry: they must in some way be creating problems that do not really exist. . . . To talk about the paradoxes, then, is to explore the role of one kind of mathematics in thought about social norms and organization. What is it about the mathematical apparatus of social choice theory that apparently so misapplies to questions of liberty?

In our opinion, there are at least two problems with the social choice-theoretic account of rights. First, a Sen right is defined as a form of power: Having a right means being able to determine a part of the social preference relation.[5] However, we often think of people having rights without having power. Consider a right to buy tickets for some concert. Obviously, one can have such a right even though one cannot ensure that one will indeed get a ticket, say, because there are more people who want to attend the concert than there are available tickets. Indeed, to say that people lack a certain power does not necessarily imply that people lack certain rights or liberties or that the rights of individuals are noncompossible. The latter conclusion follows only if the notion of noncompossible rights is considerably stretched: It now refers to the impossibility of mutually compatible powers. And this is precisely what happens in the Sen approach—if each person's preference for attending the concert leads to a veto of the outcomes in which he/she does not have a ticket, a cycle of the social preference relation emerges.

Second, even if all rights were powers, defining rights in terms of decisiveness makes it difficult to distinguish between *having* rights and *exercising* them. If a person strictly prefers $x$ to $y$ and is decisive over $(x, y)$, then, by Sen's account of rights, $x$ is socially preferred to $y$. The fact that a person has a strict preference and is decisive *entails* that the social preference relation is partly fixed, that is, that having rights is equivalent to exercising them. But we normally make a distinction between having a right and exercising it. If I have a right to read a book, I have that right whether or not I ever read the book.

One way of avoiding the conclusion that, in the social choice approach, one cannot distinguish between having and exercising a right is to say that the preferences of an individual can be interpreted as choices made by that individual (see, e.g., Sen 1992, 148). The rights that individuals have are described by the sets for which they are decisive, and the preferences of the individuals describe the ways in which they decide to exercise them. Suppose that I strictly prefer $x$ to $y$, that is, suppose that I choose $x$ when faced with a choice between $x$ and $y$. This choice is hypothetical since I am confronted not only with $x$ and $y$, but also with many other alternatives. In this approach, people exercise rights by making certain hypothetical choices. Two observations are in order. First, the noncompossibility of Sen rights does not disappear. The impossibility result still remains valid but can now be understood as the impossibility of translating all relevant hypothetical choices into one coherent social preference relation: Individuals cannot always exercise their rights simultaneously. Second, both the exercise and the possible violation of rights are about the choices we actually make, not about hypothetical ones.

Thus, the social choice definition of rights leads to counterintuitive conclusions since all rights are assumed to be powers, and the distinction between having rights and exercising them evaporates. Dissatisfaction with these counterintuitive consequences has led to a different way of formalizing rights, *viz*., through the use of game-theoretic tools. In the next section we briefly sketch the outlines of the game-theoretic approach.

## GAME FORMS AND EFFECTIVITY FUNCTIONS

Recently, social choice writers have developed game-theoretic approaches to the study of rights and freedoms (Fleurbaey and Van Hees 2000; Gaertner, Pattanaik, and Suzumura 1992; Gärdenfors 1981; Hammond 1996; Pattanaik 1996). The basic idea underlying game-theoretic approaches is that rights do not depend on individuals' preferences, as is the case with a definition in terms of decisiveness, but on the things individuals are and are not allowed to do, that is, on their admissible strategies. The approaches were designed to characterize rights formally in a manner

[5] Note that here, and in the rest of the paper, we do not use the term "power" in the Hohfeld sense in which it forms a type of right, that is, the one that describes the permissibility of bringing about changes in normative (legal or moral) relations. For a game-theoretic description of the various Hohfeld types of rights, see Van Hees 1995.



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preferable to the *ML* condition but were not designed to overcome the "impossibility" result (though see Van Hees 1999, 2000b).

Two types of game-theoretic approaches can be distinguished. The first, based on work originally by Gärdenfors (1981), suggests that rights may be represented by effectivity functions. In this approach rights are described in terms of sets of outcomes of which a person can secure elements. The right to wear a black shirt means that a person is effective for a set of outcomes that are all characterized by that person wearing a black shirt. If the right is exercised, one of those outcomes is realized. The second approach represents rights directly in terms of a normal game form. A game form is a game where the utility function of each player remains unassigned. So it includes a list of the players, a list of alternative strategies for each player, and an outcome from every combination of strategies that may be chosen. Taking the notion of "admissibility" as a primitive term, that is, as a term that is not further explicated, some of the strategies of the individuals are labelled admissible while others are not. The rights of individuals are subsequently specified by the freedom each has to choose any of their admissible strategies and/or by the obligation not to choose a nonadmissible strategy (Gaertner, Pattanaik, and Suzumura 1992, p. 173; Suzumura 1991, p. 229).

The two approaches are not independent of each other. One way of viewing the effectivity approach is to say that it specifies how to distill the exact specification of rights from a given normal game form. Of course, we then need to make clear in what circumstances a person can be said to be effective for a set of outcomes, that is, what it means to say that a person can "secure" a certain outcome. Two types of effectivily have been used: $\alpha$-effectivity and $\beta$-effectivity. The first is defined as an individual's *power* to force an outcome from any set: Given a normal game form, a person is $\alpha$-effective for a set of outcomes under any strategy that, regardless of whatever admissible strategies the others adopt, leads to an outcome belonging to that set. The notion of $\beta$-effectivity is much weaker since it does not guarantee that a person can secure some outcome no matter what anyone else does—rather it is defined by the absence of a *blocking power* by the others: A person is $\beta$-effective for a set $A$ if the group consisting of all others is not $\alpha$-effective for a set disjoint from $A$.

There is a potential problem, however, with inducing "rights as effectivity" from a normal game form if it is assumed that the normal game form contains only feasible strategies (some of which are admissible while others are nonadmissible). In that case effectivity functions may be too strong for an account of rights. Take, for example, my right to wear a blue shirt. Presumably, I have such a right even though I am unable to choose one—say, because I messed up the colors of my clothes while doing my laundry. That is, even though everyone else has adopted admissible strategies, I may not be effective (whether in the $\alpha$- or $\beta$-sense) for a set of outcomes in which I wear a blue shirt. This sort of problem can be accommodated if it is assumed that the game form from which effectivity functions are derived can differ across individuals (Van Hees 1995). We then assign to each individual a normal game form that describes that individual's "deontic realm." To see whether a person has a certain right, we examine whether the person is effective for the relevant set of outcomes in the game form that has been specifically assigned to that person, that is, whether someone is effective for that set in that person's own deontic realm. Since individuals may have been assigned different game forms, that is, may have different deontic realms, the described problems need not arise. It is, for instance, perfectly possible that I have the power to see to it that a certain outcome is realized in my deontic realm, whereas you have in your deontic realm the power to see to the realization of the contrary state of affairs.[6] Although the notion of a deontic realm can be interpreted in different ways, it is clear that insofar as the deontic realms of individuals differ, they denote different "worlds" (whether possible or not). But that means that the problems are not solved by showing that rights are compossible after all, that is, that they can exist in one and the same possible world, but by implicitly abandoning the notion of noncompossibility of rights.

Furthermore, there is a problem that underlies all of the game-theoretic approaches to rights that have been developed so far and that consists of their neglect of the intentions of individuals. For instance, contrary to what the effectivity approach suggests, rights can exist even where I am not effective (however defined) in bringing about some outcome. What matters also is whether someone has *deliberately* stopped me from being effective in an illegal manner. Imagine that I am on my way to the polls but am held up in heavy traffic and they are closed by the time I arrive. My right to vote has not been infringed, even though my strategy of voting—driving to the polls—was not effective—certainly not in the $\alpha$-sense but perhaps also not in the $\beta$-sense. My right to vote has not even been infringed if the heavy traffic was caused by an accident due to someone doing something illegal—driving faster than the legal limit. My right to vote would be infringed only if someone did something illegal *in order* to stop me from voting, such as a refusal to recognize my registration card as legitimate. To accommodate these problems, a game-theoretic account of rights should also refer to the intentions that individuals have, and thus far this has not been done.

## STEINER'S RIGHTS COMPOSSIBILITY

In both Sen's and the effectivity approach, rights are conceived in terms of ways of realizing certain outcomes. Sen defends his account on the grounds that actions and their consequences are closely related. Steiner, too, though he sees rights as pertaining to actions, understands rights compossibility as concerning

[6] Note, incidentally, that an approach in which each person is assigned their own game form generalizes the one in which there is only one game form from which all effectivity functions are derived. The latter then simply forms a special case, to wit, the one in which all individuals have been assigned the same game form.

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the object-temporal or spatiotemporal coincidence of the extensional specification of actions. In that sense actions and their outcomes are closely linked. Furthermore, both the social choice and the effectivity approach define rights in terms of powers. Steiner's account of rights, though not formalized in the same way, also sees rights much in terms of powers, and so similar compossibility problems arise.[7]

In terms of the Hohfeldian classification, Steiner views rights as claims or immunities such that the right-holder possesses the powers to enforce or waive the constraints that are logically implied by it. For instance, if A has a claim that B performs $x$, then B has the duty to perform $x$ unless A waives this duty. In our discussion of Steiner's theory we do not focus on these claims or immunities as such, but on the liberties that are implied by them. Steiner makes clear that the exercise of rights that form part of a compossible set of rights should issue in the performance of actions that are compossible. We argue that this requirement cannot be satisfied in a meaningful way, which entails that the compossibility of rights as conceived by Steiner forms a problem.[8]

An act-type is a class of acts for which each act-token is an instantiation of that act-type. "Freedom of expression" is an act-type, for which my saying "Down with the government" on the pavement at Whitehall on Thursday, March 8, 2001, at precisely 2:15 PM is an act-token. But my statement at that time is also an act-token of the class of acts of saying "Down with the government." We normally think of rights and liberties as act-types, or rather more carefully we think of them as claims for act-types. The right to free speech is a liberty, immunity against the removal of the liberty, and rights against certain types of interference with the exercise of that liberty. Thus the right to be able to express oneself freely on controversial political, social, and scientific matters without hindrance from the state, indeed protection from the state against others who may illegitimately try to stop me, is a complex set of interrelated rights, liberties, and immunities.[9] Whether or not I want to express myself, or ever do express myself, on social and political matters does not affect whether or not my right to do so is protected. (This means both the protection of my liberty-to-speak by my immunity and the protection of my ability-to-exercise-my-liberty by my rights.) Similarly a right to be educated or for decent health care is the right that the state will facilitate provision of education and health care. This is so whether or not I play truant from school or never feel the need to go to the doctor. In that sense we ordinarily think of rights as being about act-types. But if rights are about act-types, then rights cannot be compossible. Or at least, to the extent that rights are about act-types, then we cannot guarantee that the exercise of those rights on any occasion is compossible. We cannot all give our conflicting views about the government at the same place and time, since my occupying this place at this time entails that you cannot occupy the same place at the same time. To the extent that resources are limited, one person's health care may need to be sacrificed for another's, while the amount devoted to the special educational needs of some may be more limited than many would wish.

For these reasons Steiner develops an account of rights compossibility specifically generated in terms of act-tokens. Immediately, we can see that Steiner's account of rights is not the language of ordinary rights talk. The justification of such a move has to be that it is the only way to make rights talk coherent, and the basis of a system of justice. However, if the cost of that coherence is to divorce it entirely from our moral world, the cost is too high. Our argument against Steiner is that is account of rights is so divorced that the cost is indeed too high.

Steiner identifies an act-token by its *extensional* description indicating its physical components. There can only be one act-token (or a particular act-type) answering to the same extensional description that has the same set of physical components. So he defines action compossibility:

> Two actions, A and B, are incompossible if there is partial (either object-temporal or spatio-temporal) coincidence between the extensional description of A and either (i) B's extensional description or (ii) C's extensional description if C is a prerequisite of B. (Steiner 1994, 37, italics removed)

From this Steiner argues that a person, $i$, is unfree to do an action if $i$'s control of at least one of its physical components is actually or subjunctively denied by another person $j$. This implies, according to Steiner, that $j$ must actually or subjunctively possess at least one of the physical components denied to $i$. The subjunctive element is important to Steiner but its nature may not be immediately clear.

The subjunctive exclusion refers to an actual exclusion inoperative only because the individual did not attempt the action. Thus if $i$ cannot leave a room because the door is locked, $i$ is unfree to leave the room even if $i$ does not attempt to do so (and has no desire to do so). It does, presumably, include the case where the door is not locked, but had $i$ attempted to leave the room, it *would have been* locked. Say, the bolt is drawn quickly as $i$'s hand touches the handle. Does it include the case

[7] We have chosen to discuss Steiner in some detail, despite his taking a choice-based approach to rights as opposed to the more popular interest-based approach, since his work most carefully and thoroughly examines the issue of compossibility.

[8] Some people, for example, Jeremy Waldron (1989, 506), maintain that "when we say rights conflict, what we really mean is that the duties they imply are not compossible." But this is too restrictive. Wellman (1995, 201) points out, using a much-cited example from Feinberg (1980), that "this is too limited a conception of rights conflict. . . . Feinberg's example reminds us that rights involve a variety of Hohfeldian positions. Any of these could conflict logically with its opposite. Just as the liberty of doing some act is the logical contradictory of a duty not to do this act, so one's power of effecting some legal or moral consequence is logically incompatible with one's disability to effect this consequence."

[9] The nature of what the right of free speech defends is important. The fact that people can go to shops and verbally inquire about the price of goods, or talk about personal matters with friends, relatives, or their doctor, is not enough for there to be free speech. The content of what one is allowed to speak is what counts. Of course, a defense of the right of freedom of speech need not be based on the importance for the speaker, but may also be in terms of what listeners gain from it (Mill 1848).



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where the door could have been locked had *i* chosen to leave the room, but would not have been, since *j*, the person who could have locked the door, would not have done so? We may assume that *j* had no desire to lock *i* in the room. Steiner is not absolutely clear on this. One would think, from his discussion on pages 37–38 of *An Essay on Rights* (1994), that in such a case, *i* would be free. We would think so because *i* has the subjunctive freedom to leave the room since, had the attempt been made, *i* would have succeeded. Person *i* would have left the room even though *j* could have prevented it had *j* so chosen. Control over actions, or the actual or subjunctive possession of the physical components of *i*'s freedom, is thus existent only given that others with preventive powers *happen* not to use them. The freedom *i* has in the actual world does not extend to other possible worlds where others' intentions and actions are different. A person's control therefore is a control only of sorts: It is a control given that the person faces no (effective) resistance; it is not the control the person would have if there were resistance from others that is not there. This might be termed "outcome power" (Dowding 1991, 48).

However, things are not so simple. The problem arises not when we consider *i*'s liberty, but when we consider *i*'s liberty together with *j*'s. Steiner insists that any subjunctive freedoms a person has, only that person can have. No two people can both have the same subjunctive freedoms. Thus *i* may be subjunctively free to post a letter in the mailbox down the road in two minutes' time, but only if there is no one else who is *subjunctively* free to post a letter in the same mailbox in exactly two minutes' time. He says, "Like actual possession, subjunctive possession cannot be ascribed to more than one person for any one time" (Steiner 1994, 41). The fact that I am able to go and post a letter two minutes from now might suggest that I have the freedom to perform that particular act-token. After all, just as in the example of leaving the room, the freedom would be absent only if there were resistance from others. However, in Steiner's view, a freedom is always a possession, and in this case—even in the absence of any potential resistance—it cannot be the case that I (subjunctively or actually) possess the same physical components of that act: There may be a host of others who *could* arrive at the mailbox just ahead of me. The fact that they do not, since none of them wants to post a letter at that precise moment, is thereby irrelevant. Steiner, in a discussion of an objection raised by Taylor (1982, 142–144) to an earlier account of his theory of freedom (Steiner 1975), acknowledges that it need not be the case that everything is always in the possession of one person or another (Steiner 1994, 40). However, what his account of subjunctive freedoms implies is that *almost nothing* can be in the possession of one person or another: It would seem that no one has any subjunctive freedoms beyond what others *could* physically stop them from doing.

This means that a person's subjunctive freedoms do not extend very far since, beyond the next few seconds, a lot of people could do actions that would stop one from doing much (some people could start a nuclear war, killing us within the next hour or two). To put the point more bluntly, the account of subjunctive freedom must be wrong. Subjunctives rule every possible act we do and do not do but could do. It means that we are never free, except in the very limited sense that what we actually do we are free to do, plus a few acts in the very near-future that no one could possibly stop us from doing in the actual world. This simply is not what we mean when we talk about human freedom. The fact that *i*'s attempt to post a letter is thwarted by a queue of people at the letterbox does not mean that *i* is not free to post a letter. It means that *i* cannot always post a letter precisely when and where *i* wants. Or, stated differently, *i* does not have the freedom to perform this particular act-token. Steiner's account of rights builds on this account of freedom and thus encounters similar problems. His choice account of rights is based upon each person's freedom being constrained only by the legitimate (or admissible) actions of others. Where *j* illegitimately locks the door on *i*, then *i*'s rights have not been not been recognized; where *j* legitimately locks the door on *i*, then *i*'s rights have not been broken. In both cases, however, *i* is not free to leave the room. However, *i*'s rights cover only the cases where freedom to do some action *x* is not overwhelmed by some other person *j*'s legitimate actions. Thus *i* does not have the right to post a letter in two minutes' time, given that others subjunctively may also be queuing to post a letter at that exact time. (To the extent that a set of people may legitimately set in motion nuclear war at any given moment, nobody has any rights beyond the next couple of hours.)[10]

Steiner (1994, 86–101) tries to accommodate these problems, by drawing on Bentham's familiar distinction between *vested* and *naked liberties*. A liberty (or permission) refers to the absence of a duty, and should not be confused with Steiner's descriptive notion of a freedom as discussed thus far. A vested liberty is a liberty that is protected by the duties that others have, whereas a naked liberty lacks such protection. The problem discussed so far can be formulated in terms of vested liberties: We have argued that what we commonly perceive as freedoms can never be seen as "completely vested." Since, by definition, a naked liberty lacks "protection," it cannot constitute possession of part of the world and, hence, cannot form a freedom in Steiner's sense. Steiner (1994, 87) does not disagree with this: "The salience of nakedness in the creation of incompossibilities is clear enough." It is for this reason that he argues that rights should consist of vested liberties (Steiner 1994, 89), that is, they should consist of liberties surrounded by "an impenetrable perimeter." However, the resulting rights catalog becomes rather peculiar if all rights are

[10] As explained in the previous section, this conclusion holds only if the deontic realms of the individuals coincide. However, it is clear that the notion of possession as used by Steiner refers to possession of a part of the world that is the same for all individuals. For instance, he argues that Becker and McEnroe, when competing for the 1990 Wimbledon Tennis Championship, cannot both be said to be free to win the championship, because "there's no possible world in which two (or more) such attempters can be both unprevented" (Steiner 1994, 41). In other words, the set of possible worlds (the deontic realm) is assumed to be identical for Becker and McEnroe.



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completely vested, that is, if there is indeed an *impenetrable* perimeter. If we want to say that I have the right to post a letter, we would have to stipulate that my vested liberty exists only between, say, 3:00 and 3:05 AM—during other time slots others have the right to post a letter. Indeed, most activities (to demonstrate, to practice a religion, to go to a concert, to surf the web, and so on) that would normally be thought of as the exercising of rights (a possible instantiation of an act-type right) should be made permissible to an individual or small group of individuals only during some particular slots in time or space. In fact, not even all individuals can be guaranteed such rights. Should we, for instance, say that at least some individuals lack the right to practice a particular religion if it is physically impossible that all individuals attend a Sunday service?

## THE EXISTENCE OF RIGHTS

Much of the discussion thus far has concerned itself with the *sense* in which a right exists, though this question has not been addressed directly. Before we go farther it is perhaps a good idea that we do address this question directly. The conditions of rights' existence are not straightforward. Rights do not exist in the sense in which the *Economist* famously defined economic "goods" (as opposed to "services"), *viz*., something that can be thrown through a window. But they do not exist even in the sense of an economic service. To the extent that we can empirically establish (and economists do empirically measure more or less successfully) the size of the service economy, the rights existent in a community cannot be so (easily) established empirically. The problem may seem even more difficult once we distinguish legal from moral rights. To illustrate, consider a claim that certain legal rights are respected in one nation but not in another. To confirm this, we might examine which rights are respected in nation X, compare this with rights in nation Y, and conclude that there are indeed more legal rights in X than Y. We may empirically quantify this by showing that more activities falling under some right *R* occur in X than in Y. Yet if we say that there are moral rights in Y that are not respected, then we are saying that the rights *exist* in both X and Y but that the respective states do not recognize or respect those rights equally.

We make a distinction between a "material" existence and a "formal" existence of a right. We say that a right exists materially if it is being respected, which means that the material existence of a right depends on the efforts of the state to protect those rights and on the ability of its population to exercise them. Formal existence, on the other hand, depends "only" on some theory, T, that specifies the rights in question: Rights formally exist insofar as they are recognized or proclaimed to exist. The theory that specifies these rights may be a moral one. It may also be one that refers to a "general recognition" of such rights, that is, rights may be seen as constituting some sort of maxim underlying the equilibrium of a game. Another possibility would be to say that the theory stipulates that rights exist in terms of some general recognition backed by the force of a law—it stipulates legal rights. We do not provide a separate analysis here of these various approaches. Rather we fold them into one kind of existence that may take each or all of these interpretations. However, further specification along these lines may be desirable under future more detailed analysis.

To some extent the problem of existence does not have to be a problem. Quine (1953, 15) famously remarked that "to be is to be the value of a variable" (see also Quine 1939). This famous dictum points out the importance of a prior doctrine or ontological standard. This serves well for the existence of rights. Our rights can be given only by the prior doctrine or standard and we need consider their existence only with regard to that doctrine, demanding only that the existence claims are coherent with regard to the logical formulation adopted. We can trivially define the existence of anything by stating the truth-conditions of the formulae in which it occurs. Less trivially, however, we may wish to consider how we can represent different kinds of existence. We present four ways in which rights can exist (*cf*. Rescher 1978).

When we speak about the existence of individual human beings, we speak of the existence of particulars as contingent members of the world.[11] This existence can, of course, be described in terms of a first-order predicate logic that contains the existence predicate E. We then write E$k$, where $k$ is an individual constant.[12] The first way in which rights can be seen to exist is in terms of the existence of properties of individuals. To say that an individual right exists is then to say that certain first-order predicates apply to certain individuals. Existence is seen as a second-order predicate that is applied to first-order predicates *in combination* with the particulars to which those first-order predicates applies. At this point, if a first-order predicate R denotes a certain right, we do not discuss the existence of such a right but the existence of this right for a particular individual $k$. In a way, the right of $k$ can be seen as a particular, where the right "as such" is a universal. To indicate that we talk here about rights that are being proclaimed by some moral or legal theory without necessarily being respected, we call this type of existence formal.

(i) The formal existence of a right as a particular: $\Sigma(\mathrm{R}k)$.

What can we say about the truth-conditions of such a formula in a world **w**? One might claim that $\Sigma(\mathrm{R}k)$ holds only if (E$k$ & R$k$). Thus an individual's right to breathe fresh air exists if, and only if, the individual exists and if he/she indeed has this right. This implies that future generations cannot now have the right to

[11] We restrict the analysis to the existence of rights in the actual world at a certain point in time, that is, we ignore modal aspects.

[12] As Hintikka (1969) has shown, if we have a semantic model in which not every individual term necessarily has a bearer, the formula "E$k$" can be seen to be equivalent to the formula "$\exists i\ (k = i)$" thereby also giving the formal rendition of Quine's famous saying. See also, for example, Quine 1970, chap. 5.



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breathe fresh air in the future. While this may be acceptable to some (it does not imply, for example, that we do not have obligations to future generations so that they can, in the future, have such rights), we may not want to exclude the existence of such rights on logical grounds only. We might therefore be inclined to infer that $\Sigma(Rk)$ presupposes only $Rk$ rather than $(Ek \,\&\, Rk)$. But then we are still making a particular ontological presupposition, to wit, the existence of the universal R. If we say that some individual possesses a right R, we assume that R is a right that exists that individuals may or may not possess. Now let $\Sigma$ again be the second-order predicate describing the existence of first-order predicates. Hence, we now also distinguish

(ii) the formal existence of a right as a universal: $\Sigma R$

and we claim that $\Sigma(Rk)$ should be defined partly in terms of $\Sigma R$. That is, we believe that to say that an individual formally possesses a particular right presupposes that the right formally exists as a universal. For instance, a bill of rights stipulates which rights exist formally as universals, and this *in turn* determines which rights formally exist as particulars. With respect to formal existence, the universals thus have ontological priority. The question of the formal existence of a right as a particular shifts to the formal existence of the corresponding universal, that is, the formal existence of the freedom or right *as such*. It is here that a prior theory T is needed that recognizes this existence.[13]

Such recognition makes clear which rights there are formally and, also, which individuals possess those rights. It does not, however, establish the more "definite" or "concrete" existence of rights when they are respected or exercised. To capture the "material" existence of rights, we introduce a different existence predicate, $\varepsilon$.

(iii) The material existence of a right as a particular: $\varepsilon(Rk)$.

What can we say about the truth-conditions of formulas of type iii? In this case we again take recourse to the prior theory T, that is, the theory also needs to stipulate the conditions that should be fulfilled before we can say that the rights a person formally possesses are respected or exercised. Assume that the fulfillment of these conditions can be described in terms of a formula $\delta$ of the formal language at hand and that the formal existence of a right is a necessary requirement for its material existence. We might then hold that $\varepsilon(Rk) \Leftrightarrow (Rk) \,\&\, \delta$. Thus an individual right exists materially if it exists formally *and* if the right is respected or exercised.

The distinction between formal and material existence can in turn be applied to rights *sui generis*. We can say, for instance, that although some society formally acknowledges some right, it is being violated—without our thereby referring to the violation of rights of specific individuals.

(iv) The material existence of a right as a universal: $\varepsilon R$.

Whereas the formal existence of rights as universals can be established without reference to the rights as particulars that individuals possess formally, the ontological priority is reversed with respect to the material existence of rights as universals: A society can formally acknowledge a right *sui generis*, but to say that those rights also exist materially, we first have to examine which rights materially exist as particulars.

To summarize, we have argued that to begin to analyze rights by their exercise is mistaken, but it is surely correct that rights "exist" in the most "definite" or "concrete" sense when they are exercised or respected by others' actions. In some important sense, rights essentially "exist" in terms of i and ii: Otherwise we would not be able to claim that rights are not being respected by the laws of some state or through actions of members of society. However, rights also have a more concrete existence when they are respected or exercised. This is captured by iii and iv. Thus the *analysis* of rights should begin at the level of the formal existence of rights *sui generis* (level ii), proceed to the formal existence of rights as particulars (level i), and *then* proceed to the level of material existence of rights as particulars (level iii) and rights *sui generis* (level iv), respectively. Of course, the nature of the existence of rights under i and ii is a form of "bootstrapping." Rights exist in the sense that they are thought to exist (whether through moral theory, through beliefs underlying behavior, or by law) but thinking that they exist leads to a more concrete existence through behavior itself or state action.

Rights can thus be seen in terms of expectations. Through our recognition of others' rights we behave differently toward them. In other words, rights are part of our social institutions that may be defined in terms of equilibrium strategies. There is a large and growing literature that examines social institutions in terms of equilibrium arrangements (see, for example, Calvert 1995, Ostrom 1991, and Schotter 1981). Specific applications of institutional theory to the analysis of rights can be found in Sened (1997) and Van Hees (2000a). Our rights theories both track such equilibrium strategies and criticize or try to modify such behavior. Often groups may try to construct new rights by extending previous claims to new domains. If such rights can form new social institutions, then these groups may be successful. In other words, moral systems and ways of representing them grow through both argument and behavior, the latter (as Rawls importantly noted) putting constraints upon the successes of the former.

This section merely forms a sketch of the nature of the existence conditions of rights. As said, the crucial parts of those conditions—the conditions $\delta$ and the theory of which they form a part—have not been specified yet. Leaving aside the issue of the material existence of rights as universals, we analyze in the next section

[13] We do not attempt here to specify the exact way of deriving the particulars from the universals. Note, however, that the existence of a right *sui generis* does not necessarily imply that *every* individual possesses the right in question.

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how the condition $\delta$ may be cashed in, that is, what it means to say that an individual right exists materially. Below we examine what that analysis entails for the other parts of the theory T.

## MEASURING RIGHTS AND FREEDOMS

These considerations lead us to examining the expectations that one may have about exercising one's rights. We briefly outline the possibilities of an approach to rights that circumvents some of the problems discussed pertaining to noncompossibility. In two important aspects we deviate from the three approaches to rights discussed above. First, we focus on the freedom to perform act-types rather than act-tokens, thus coming closer to ordinary rights vocabulary. Second, we reverse the relation between judgments about which specific freedoms an individual has and judgments about the *extent* (or degree) of a person's (overall) freedom. Rather than examining which freedoms an individual has and, on the basis of that information, examining the extent of a person's freedom, we derive a judgment about what freedoms a person (materially) has from judgments about the extent of that person's freedom. Although we limit the analysis to showing how a measurement of (overall) *freedom* can help to establish the existence of (particular) *freedoms*, we also claim that the approach can be used to establish the existence of other types of rights.

We want to ascertain whether a person (materially) possesses a certain act-type right R and we assume that the individual possesses the right in the formal sense. Let $r_1, \ldots, r_k$ denote act-tokens instantiating the right. R may stand, for instance, for freedom of speech, and $r_1$ may stand for shouting "Down with the government" at Whitehall at a given time and date, $r_2$ may stand for shouting the same thing at Piccadilly Circus, and so on. Now we want to derive a "freedom function" $\Gamma$ that assigns a value between 0 and 1 to each R—the value $\Gamma(\mathrm{R})$ describing the extent to which a person is free to do R. Suppose that for each act-token $r_i$, we can define the probability $p(r_1)$ that the act-token will, in the relevant manner, not be prevented. Assuming that these probabilities determine to what extent a person is free to perform R, we have $\Gamma(\mathrm{R}) = \Gamma(p(r_1), \ldots, p(r_k))$. That is, the extent to which a person is free to do R depends on the probabilities with which each of the relevant act-tokens will not be prevented.

It might be objected by those taking an all-or-nothing view to the existence of freedom that what we are specifying here is "the probability of a person's being free to perform R" rather than the extent to which he/she is free to do R.[14] To the extent that our analysis is consistent with the "all-or-nothing" view of liberty or freedom, there is perhaps nothing wrong with interpreting freedom in this manner. We take it that our analysis teases out what most people mean when they talk about freedom. However, the fact that everything can be translated from everyday language to a clumsier formulation is not a reason for preferring the latter: especially so when one considers that the implication of the clumsy formulation is that what people value in a free society is not the extent of their freedom, but "the probability of being free to do R, S, . . . ." We claim that the extent of people's freedom is specified by their probability of being free to do R, S, . . . , but see no point in declaring that people are wrong about what they claim they value. In other words, analyzing these claims in terms of a formal language (a translation) is preferable to attempting to change the claims into a language most people would not recognize.

For Steiner, rights pertain to act-tokens, not to act-types. If one, neverthless, wants to make claims about the existence of act-type rights, it seems that there is only one way of carrying out such an analysis that is compatible with Steiner's approach. As we saw, for Steiner, having a right means possessing a part of the world. If a person has the act-type "freedom of speech," then there should be at least one act-token instantiating it that the person can be sure to realize. The main noncompossibility problem described thus far—the impossibility of *ensuring* that a person can perform some act-token—can now be taken to mean that the probability that some particular act-token will not be prevented will usually not be one. If $\delta$ indeed stipulates that the value of at least one of the relevant probabilities should be one, then rights are noncompossible. But this is too strong. We cannot be said not to possess the right of free speech, the right to attend a church service, the right to post a letter, and so on, simply because in some circumstances we are not able to exercise them.

We cannot say that the material existence of a right depends on at least one of the relevant act-token probabilities having a value of one. It seems much more natural to suppose that the existence will depend on the value that the function $\Gamma$ assigns, and this value may be positive even if all of the relevant act-token probabilities are lower than one. Indeed, as the extensive recent literature on measuring freedom suggests, there are many ways in which the function $\Gamma$ can be defined (see, for example, Arrow 1995, Carter 1999, Dowding 1992, Pattanaik and Xu 1990, 1998, Rosenbaum 2000, Sen 1991, Sugden 1998, and Van Hees 2000a). One possibility is for the value to be determined by the act-token with the highest probability of not being prevented. Thus, if at Piccadilly Circus, I have the highest probability of not being prevented from protesting, then that probability describes the extent of my freedom of speech. Another possibility might be to take the average values of the various probabilities. For instance, one could argue that the extent of freedom is severely limited if one is only permitted to protest at a particular place – the other probabilities should therefore also be taken into account. Deciding between these and the many other possibilities may be a very difficult task, and this is not the place to explore this issue further.[15] Let us simply suppose that we have

[14] Kramer (2002) argues for such a view. In a personal communication Kramer points out that, apart from this quibble, his approach is perfectly consistent with the rest of the analysis.

[15] One could also argue that the value of $\Gamma$ should depend on the probabilities that various *sets* of compossible act-tokens will be



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a particular Γ with which we can establish the extent to which a person is free to perform various act-types. This information is used subsequently to define which act-types a person is free to perform. Again, an all-or-nothing approach is counterintuitive: We do not say that a person lacks the freedom to perform a particular act-type if, and only if, the extent of that person's freedom to perform that act-type is one. It may be more plausible to claim that for each act-type right, a specific threshold value exists: If the relevant Γ value exceeds that value, the person has the right; otherwise he/she does not. Although there is no particular point in time or public place at which I can be absolutely sure to have the opportunity to protest against the government, the value of Γ will be sufficiently high to say that my right is unaffected.[16] The proposition $\delta$, which is used to determine whether an individual right exists materially, thus is true indeed.

Such a method departs from the usual approaches to the measurement of freedom. Rather than starting with the freedoms an individual has and subsequently building a judgment about the extent of the person's freedom, the order is reversed. First, we examine the extent to which a person is free to perform certain act-types. That extent, which is specified by Γ, and a specification of the various threshold values, subsequently determines which (material) freedoms and rights an individual is said to have. In other words, first we measure how free individuals are and then we determine which freedoms and rights they have.[17] Although we have only illustrated the approach with respect to the establishment of freedoms, the framework is general enough to derive judgments about the existence of other types of rights.

This is just a brief outline of an alternative approach. Many questions still need to be addressed. Particularly relevant is the question of how the various Hohfeld types of rights can be distinguished within our framework. Although the probabilities pertain to the freedom to perform an act and thus to liberty-rights only, the other Hohfeld types can be described in terms of these liberty-rights. For instance, to say that A has a claim-right that B performs x means that B has the liberty to perform x and does not have the liberty not to perform x, and it also entails that A has the liberty to perform an action (i.e., to waive the duty) such that the resulting state of affairs is one in which B does have the liberty to abstain from performing x. Moreover, many questions need to be addressed with respect to the nature of Γ and the various threshold values. We do not go into these questions here, but we mention various advantages of the approach that may help to motivate further exploration. First, the use of threshold values enables us to make clear that for some rights act-token incompossibilities matter more heavily than for others. At the same time, the costs of raising the probabilities of rights being exercised also matter. For example, having access to medical care may be thought to be more important than being able to post a letter at a nearby mailbox. But ensuring that one may have one's health problems sorted out, no matter what they are, is far more costly than ensuring good access to mailboxes. Both importance and cost need to be considered when considering threshold values.

Second, the approach may enable us to incorporate the earlier-mentioned relation between intentions and rights. After all, others' intentions affect the probabilities. If others intend to prevent me from going to the voting booth, and they have the means to carry out—or at least try to carry out—these intentions, then the probability that I will be able to vote will affect the relevant Γ value. My right is violated only when the relevant Γ value falls below the threshold value. The threshold value may be much lower when nonintentional acts stop me from voting. For example, if the journey to the voting booth is very long and hazardous, with a high probability of failure, even though no one is trying to stop me, we may feel that one does not have the right to vote. (Or imagine that there are so few voting booths open, for such a short period of time, that it is not possible for all those registered to vote at that booth to do so in the time it is open. As recent events have shown, this example is not fantastic.) In this case, the low probability of my being able to exercise my right should be obvious, and one may legitimately expect the state to increase that probability—by increasing the number of voting booths, allowing postal votes, and so on. This approach allows us to recognize, however, that my right to vote is not always violated when someone does something to stop me, as in the traffic accident example discussed above. What matters is the *probability* of being able to exercise the right and the *reasons* why that probability holds.

Third, the approach enables us to make clearer the distinction between rights and freedoms. Freedom is a generic term that refers to all possible acts, whereas rights refer to acts the probabilities of which are affected by legal or moral considerations. My right to vote implies that I am protected against others' acting against me in certain ways and for which provisions are made such that I have a given minimum probability (the threshold value) of being able to exercise the right. Without that legal protection, the relevant probability would be lower.

Fourth, we may note that it enables us to handle positive rights and negative rights in much the same manner. In both cases we are looking at the probabilities of our rights being, in the first case, respected and, in the second, exercised. It thereby also enables us to take due consideration of the moral value of rights and of the costs of protecting them. One may expect any

unprevented, rather than on the probabilities that singular act-tokens will be unprevented. For an elaborate defense of such an approach, see Carter 1999.

[16] There may be places where no absolute right is important. One would hardly claim that we have the right to free speech if it is allowed only where no one else can hear. There is a difference between protesting down Whitehall or Piccadilly Circus and being allowed to march only on Dartmoor.

[17] Note that our analysis suggests that how $\delta$ is specified is a choice that is made given judgments about the world in which freedoms are being considered. It is an *a posteriori* judgment that cannot be made independent of our experience of the world and our expectations of what is practically possible.

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society to value the same negative and positive rights equally, but not expect a poor society to be able to protect negative rights as strongly or provide as many positive rights as a rich one.

## CONCLUSION

Rights are noncompossible in an important sense. Rights as defined in both the social choice-theoretic and the game-theoretic approaches are noncompossible. Steiner's sophisticated attempt to specify a form of rights as act-tokens also fails to deliver rights compossibility in any interesting sense. If one is free to do some action only if one is subjunctively free to do it and others are not as subjunctively free, then the rights one has over such actions are nonexistent or vanishingly small. While Steiner's account is not strictly logically contradictory, when examined it looks more like a *reductio ad absurdum* of rights theory than a defense. Certainly it is far from the nature of rights as recognized in traditional political theory and in everyday moral talk.

The noncompossiblity of rights is an embarrassment especially to those who want to argue that rights form the *foundation* or *basis* of justice. Those who see rights as an important component of our moral and political thought can view their noncompossibility with equanimity. We can still attempt to measure and quantify individual rights by the extent of individual freedoms to carry out actions, and to not be subject to the domination of others, within the scope of the rights presupposed by moral theory. The extent of these freedom judgments does not require that individuals *necessarily* are able to carry out everything they wish under the terms of the rights. That is what is meant by rights noncompossibility. We cannot all exercise all of our rights simultaneously, but it does not follow from that that we do not have those rights. Where rights clash, we examine the grounds of the rights and other moral considerations to see which rights claim should prevail, in each circumstance. Moral theories are not complete, they develop over time, but our moral theory does guide such decisions.

If rights are noncompossible but form an important part of moral and political theory, it is natural to question the nature of their existence. Quantifying their existence conditions is not a trivial matter. Rights exist in many senses. They exist as presupposed by a moral or political theory. They exist as claims under such a theory. They exist in the sense that individuals recognize their existence and act accordingly. They exist as set out in legal documents subject to defense by the state and private litigation. We have begun to tease out some of these existences and place them in the context of their exercise and recognition.

While rights do not guarantee their own exercise, they have only a weak existence (a theoretical existence) if there is no chance of their being respected by others or of their being exercised. This suggests that we need to examine the probability that individuals' rights will be respected and that they may be able to exercise their rights. These judgments will depend upon prior moral considerations—which include what types of actions and constraints need to be taken into account in the probability judgments, what kind of freedom function we understand, and so on. There is no reason to think that every right should have the same probability of being successfully exercised. Many considerations, both pragmatic and moral, enter into the consideration of what threshold value—or probability—each exercise should take. Different threshold values may exist for different sorts of rights, and such threshold values may have to be traded one for another in different societies. "Overall" comparison of rights or freedoms across societies may be extremely difficult or even impossible. However, it does not rule out comparisons with respect to certain categories of rights and freedoms for partial comparability.

Can the notion of compossibility of rights also be applied to our alternative conception of rights? Theoretically, it can. However, it is doubtful whether it is possible to give a proof of compossibility or noncompossibility to a reasonable set of rights within our framework. Given the logical relations between various right types, and the interdependence of the various probability distributions, constructing a (nontrivial) set of rights that can be shown to be compossible (or noncompossible) would be complex.[18] Yet it can be safely inferred that since our probabilistic account of rights is weaker than the other accounts of rights we have described, compossibility results are more likely to occur. More importantly, however, is that the issue of compossibility has lost its urgency in our framework. Compossibility may be one consideration relevant in the construction of rights, and hence in establishing, for instance, the various threshold values, but in our framework there is no reason for giving it *a priori* overriding importance.

Our formal approach to the nature and measurement of rights and freedom is more in tune with everyday intuitions and standard accounts of rights in political philosophy than extant formal accounts. It provides a framework to start an assessment of the extent of rights in different nations understood in different senses and allows us to measure rights and freedoms both through the statutory and institutional forms in which they may be identified in different countries and through their exercise. The number of people who exercise rights in one country relative to the number in another, taking into account other relevant features, gives us an indication of the probability that such rights can be exercised. The distribution of such exercise across different social groups also gives us an indication of the bias in any system of rights.

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[18] Here a game-theoretic approach may be helpful. It would differ from existing game-theoretic approaches in that it would use information about the probability that certain (equilibrium) outcomes will emerge to derive a specification of which strategies are admissible and which are not.



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