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Ethical issues in the release of animals from captivity

Animals have long been held in captivity for various purposes, most notably entertainment, education, research, and conservation. The animal liberation and animal rights movements have in recent decades helped change the way people think about animals and about the way that animals should be treated. These efforts have led to a closer examination of the treatment of animals in captivity and to questions about the ethics of holding wild animals captive. Such examinations have led in turn to recent public and scientific interest in the possibility of releasing captive animals back into the wild. For the general public, there is an intuitive appeal to an animal's living in the wild rather than in captivity. Rarely, however, is it an appeal informed by careful scientific or ethical analysis. The process of release and the reintegration of an animal into its native habitat is often not considered in detail, but is instead idealized and assumed to be necessarily successful.

To address the ethics of release projects, it is necessary to define several important terms. We use the term *release* to refer to the placement of an animal, either born in captivity or captured and maintained in captivity for an extended time, into the wild where it is no longer under human care or supervision. Although each release project is likely to have its own criteria for success, we consider as successful those releases in which each released animal has fully integrated into a local wild population, is able to survive without further human aid, and no longer seeks interaction with humans. The term *rehabilitation* is often used to describe the treatment of wild ani-

mals found injured or ill, taken into captivity until restored to full health, and then returned to the wild. We do not discuss releases subsequent to rehabilitation efforts, because the time spent recuperating in captivity is usually minimal and rarely results in the loss of survival skills. For the purposes of this article, rehabilitation will instead refer to the retraining program used to prepare captive animals for release.

There are four principal grounds for the release of captive animals: a lack of sufficient space in captive facilities due to overly successful breeding programs; the closure of facilities for financial or other reasons; pressure from animal liberation or other groups for the release of captive animals (although it is also feasible that a holding facility might decide independently to adopt the principles of such groups); and to aid the conservation of endangered species. An example encompassing the first two grounds is the release of nine bottlenose dolphins from Atlantis Marine Park in Western Australia in 1991 (Gales and Waples 1993). An overly successful breeding program, combined with changes to government regulations on holding facilities, necessitated the construction of a new dolphin enclosure. This requirement compounded preexisting financial problems, and the park was forced to close. An example of the third ground is the "Free Willy" campaign, in which animal activist organizations have pursued the release of captive killer whales. At least two individual killer whales, the animal depicted in the movie "Free Willy" (Keiko, currently held in a dedicated facility in Oregon) and one held in an aquarium in Florida (Lolita), have been targeted by the campaign, and public pressure has been applied to encourage their release.

Most release projects to date have, however, arisen out of a concern for the conservation of endangered species. Many conservation projects, involving a variety of bird and mammal species, have contributed to the scientific data available for establishing guidelines and determining protocol for future release efforts. (Reports on specific release projects include: primates—Aveling and Mitchell 1982, Beck et al. 1991, Borner 1985, Kleiman et al. 1984; canids—Fritts et al. 1985, Moore and Smith 1991; birds—Ounsted 1991, Toone and Wallace 1992; and ungulates—Gordon 1991. Reviews that compare and contrast multiple release projects include: birds and mammals—Ludwig and Mikolajczaks 1985, Stanley Price 1991, Wilson and Stanley Price 1992; primates—Hannah and McGrew 1991, Konstant and Mittermeier 1982; and captive-born animals—Beck et al. 1994). These projects have typically involved breeding animals in captivity for future release, translocating animals from an area where the species is abundant to one where it was once common but is now scarce, or reintroducing captive animals into a habitat once occupied by the species.

Although each of these justifications for release projects is worthy of close ethical analysis, we focus instead on how release projects should be conducted. The question is not "when should animals be released?" or even "is it always better to release animals than to euthanize them?" but "what are the duties of humans toward animals that are to be released?" We focus on the ethical issues relevant to the planning of a rehabilitation and release project and contend that animals deserve moral consideration and that humans, as moral agents, have responsibilities to them. These responsi-

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bilities include the duty to not kill animals for trivial reasons and the duty to not cause animals unnecessary suffering. We argue that animal caretakers have particular ethical duties to captive animals made dependent on human care and that these duties extend to those proposing and implementing release projects. These duties continue until a released animal is self-sufficient, a fact that highlights the importance of responsible selection of release candidates, of planning and implementation of the rehabilitation process, and of postrelease monitoring and assessment. We describe factors that increase the likelihood of postrelease survival and strongly recommend their consideration in future release projects.

The responsibilities of caretakers

To argue that there are compelling reasons for humans to care for animals in the process of release, it is necessary first to establish that there is some human responsibility toward animals at all. It is generally accepted that moral consideration is owed by all humans to other humans. That is, there are certain responsibilities that each one of us owes to other humans, such as the responsibility to not kill or cause unnecessary suffering (or at least, to not do so without some powerful justification). These responsibilities are held toward all humans, including those who cannot speak for themselves or lack rational abilities (e.g., infants and the mentally infirm), because they protect or further the basic needs and desires—or interests—of each individual. But animals, too, have such interests. If one accepts the moral and communal significance of interests, there is no ethically relevant reason for distinguishing the scope of moral concern to include humans but exclude animals.

Establishing the moral importance of interests is considered by many philosophers as a key to developing a more satisfactory ethical relationship between human and nonhuman animals. But this task need not involve a consensus as to why interests are of such foundational importance.

For example, three prominent philosophers whose work has largely shaped recent research and debate in animal ethics—Bernard Rollin, Peter Singer, and Tom Regan—take quite distinctive approaches.

In *Animal Rights and Human Morality*, Rollin (1992) argues that the key to creating a consensus ethical ideal for the treatment of animals lies in the existence of a consensus social ethical ideal for the treatment of humans in society. Humans readily extend moral consideration to other humans, and they consequently recognize and abide by the associated responsibilities and duties. This conception of moral concern and consequent duties, he contends, can serve as a guide to the duties and responsibilities owed to other beings of moral standing, because “if we can find no morally relevant differences between humans and animals, and if we accept the idea that moral notions apply to humans, it follows that we must rationally extend the scope of moral concern to animals” (Rollin 1992, p. 30).

The usual ground for excluding animals from moral concern lies in the genetic, psychophysiological, and sociobiological differences between human and nonhuman animals. But Rollin argues that because none of these differences is morally relevant, they cannot justify the exclusion. Even the capacity to experience pleasure and pain (which is sometimes used to include animals within the scope of ethical consideration) is an inadequate ground for attributing moral concern. Rollin argues instead that “what makes something fall within the scope of moral concern of a being capable of moral action is the presence of needs, desires, goals, aims, wants, or, more generally, interests which that being has and which a being capable of moral action can help, ignore or hinder” (Rollin 1992, p. 71). The needs of animals fall in the category of interests, he contends, because the needs in question “matter” to the animal. Rollin considers this to be sufficient reason for animals to receive moral consideration.

An argument for the extension of some moral standing to animals can also be found in the work of Singer

(1993), whose position is founded on the principle of equality. This principle extends to all humans an equal consideration of their interests despite otherwise vast differences between them. Singer asserts that the principle of equality “provides a basis that can’t be limited to humans” (Singer 1993). He argues that if application of the principle cannot reasonably depend on differences in intelligence, race, or ability, then neither should it depend on species. According to Singer, the capacity for suffering and enjoyment is a necessary and sufficient condition for one’s having interests, so that “if a being suffers, there can be no moral justification for refusing to take that suffering into consideration.... The principle of equality requires that the suffering be counted equally with the like suffering of any other being” (Singer 1993, p. 57). He consequently takes this capacity to be the only defensible boundary of concern for the interests of others. Because such a capacity is shared by at least all sentient beings, the principle of equality demands the ethical consideration of many animals (Singer 1989).

Yet another approach is taken by Regan (1989), who critiques the understanding of the moral status of animals adopted by those who deny the existence of animal rights. Contractarianism and utilitarianism, for example, fail to account for the inherent value of the individual. Regan insists that not only do all humans have inherent value and that all who have inherent value have it equally, but that this value is the basis of an individual’s “rights,” which, he argues, stand behind each person’s moral duties to others.

Excluding animals from the scope of moral concern on the basis of their differences from humans is again shown to be untenable. As Regan points out, there are more basic similarities between humans and nonhuman animals than differences, so that animals, too, must have inherent value. The similarity of greatest importance is that “we are each of us the experiencing subjects of a life, a conscious creature having an individual welfare that has importance to us whatever our usefulness to others.... All dimen-

sions of our life, including our pleasure and pain, our enjoyment and suffering, our satisfaction and frustration, our continued existence or our untimely death—all make a difference to the quality of our life. As the same is true of animals...they, too, must be viewed as the experiencing subjects of a life with inherent value of their own” (Regan 1989, pp. 111–112). Consequently, any attribution of moral concern based on inherent value should extend to all animals.

Each of these philosophers recognizes that at least some animals have interests and that this is sufficient reason to extend the circle of moral concern beyond humans alone. Interests are considered by Rollin (1992) to involve “needs” and “desires,” by Singer (1989, 1993) to be linked to a capacity to experience and to feel desires and have goals, and by Regan (1989) to be consequent to one’s being “the subject of a life.” Our purpose here is not to choose the best or most convincing of the arguments, but rather to point out that a general acceptance of the existence of “interests” can lead to a recognition of moral concern and consequent duties.

The existence of a human responsibility toward animals leaves open the question of the kinds of duties attending this responsibility. Parallels between human and animal interests suggest that any minimal set of duties owed by humans to animals might be similar to those owed to other humans. Because humans readily accept the value of a human life and the significance of pleasure and pain (or suffering), we might suppose that any set of duties owed to animals must include not causing them unnecessary death or suffering.

Such a position is philosophically supportable in several ways. One might argue, for example, as Rollin does, that “if being alive is the basis for being a moral object, and if all other interests and deeds are predicated upon life, then the most basic, morally relevant aspect of a creature is its life” (Rollin 1992, p. 84). Consequently it would seem that the most important duty owed a being worthy of moral concern is to not cause its death unnecessarily. Fur-

ther, Rollin considers the capacity for the experience of pleasure and pain to be involved in the attribution of moral concern and to underlie many examples of interests that can be helped or hindered by other moral agents. If it is immoral to cause a human unnecessary suffering, so should it be in the case of an animal.

Alternatively, one might base a description of the appropriate treatment of beings worthy of moral concern on utilitarian arguments, in which the best action is one that maximizes aggregate good. Such an approach is adopted by Singer. In some of his earlier works, he employs a theory of “hedonistic utilitarianism,” in which “good” refers to happiness that is based on the experience of pleasure and the absence of pain (Singer 1975). The morally best actions are those that maximize pleasure and minimize pain, whereas actions that cause unnecessary suffering are considered wrong.

Singer also uses “preference utilitarianism,” in which “good” refers to the maximal satisfaction of preferences, in his consideration of the ethical implications of killing animals (Singer 1993). He considers the painless killing of self-conscious beings with future-oriented desires and intentions to be wrong because death precludes the possibility of the satisfaction of these desires. However, this position can extend only to those beings possessing cognitive faculties allowing self-consciousness and the generation of future-directed preferences and interests. Singer is somewhat equivocal about which animals meet this criterion. He is sure that humans, great apes, whales, dolphins, dogs, and other higher mammals are included, but is less confident in the case of cattle, sheep, seals, and so on. The case of fish and birds is even more problematic. The issue is a complex one and remains unresolved. What is important for this article, however, is that most releases from captivity involve either primates, cetaceans, or canines, animals that are clearly capable of the kind of thought distinguished by Singer. The case of birds, the other kind of animal regularly considered for release, needs further investigation.

Singer (1993) also uses preference utilitarianism to counter the view that animals are in some sense replaceable; that is, that it is morally reasonable to painlessly kill an individual if that individual will be replaced by an equally “happy” one. Whereas a hedonistic utilitarian might reach this conclusion, preference utilitarianism must take account of the future, unsatisfied interests of the individual that has been killed, necessarily concluding that the killing was ethically unjustifiable, at least in the case of self-conscious beings having significant future interests and preferences.

The ethical relevance of duties accounting for the value of life and the significance of pleasure and pain might also be premised on the existence of certain inviolable rights. Regan (1989), for example, holds that all individuals worthy of moral concern have such rights. He argues that no individual should be harmed for the benefit of others, so that, for example, every human has a direct duty to not cause nontrivial pain to others and a correlative right to not be made to suffer. Regan considers that harm ought to be measured in terms of the degree of restriction imposed on an individual’s capacity to form and satisfy desires. Death is always, then, the greatest harm that an individual can suffer, so that killing another individual should be avoided in all but the most extreme circumstances (these circumstances are defined by Regan in terms of various ethical tests). If we accept that moral consideration should extend to animals, then the rights to not be made to suffer or die unnecessarily must also apply to animals as well as to humans.

We find again that several different philosophical approaches lead to a similar conclusion: that humans, as moral agents, have a responsibility to not cause the unnecessary suffering or death of an animal. This conclusion could be invalidated only by providing conclusive reasons for differentiating between the moral standing of humans and that of animals.

How does this conclusion relate specifically to captive animals? We contend that humans accept a responsibility to captive animals by

taking them into a situation in which they are made dependent (for survival) on human care. Conditions in captivity often mean that an animal is unable to fulfill its own needs, and survival and other skills therefore deteriorate. The welfare of the animal then becomes the responsibility of the caretaker, analogous to the responsibility of a parent toward his or her children.

Therefore, it is reasonable to conclude that caretakers of captive animals are at the very least responsible for ensuring that an animal does not die or suffer unnecessarily and that this responsibility continues until there is evidence that the animal can survive on its own. Furthermore, just as a responsible parent should prepare a child for the time when she will be on her own, so we suggest that a responsible caretaker should adequately prepare (i.e., train and condition) any animal that is a candidate for release into the wild. If there is evidence that the animal is unable, in the absence of human intervention, to survive without suffering, then the caretaker has a responsibility to return the animal to captivity. Animals that are not releasable should be kept until such time as they either die naturally or require painless medical euthanasia to avoid acute suffering. In the light of the duty to avoid the unnecessary death of an animal, any justification of euthanasia by caretakers would need to be both compelling and framed in terms of the other duty of this minimal set. Euthanasia is not, then, in the absence of pain and suffering, a viable alternative for nonreleasable animals.

Elements of a responsible release project

Conditions at many captive facilities have improved dramatically over the last few decades, often allowing animals to live in relatively natural settings with social groups similar to those found in the wild. However, the confines of captivity and dependence of animals on humans to satisfy their needs still result in certain characteristics typical of long-term captive animals and captive-born individuals that are not shared by wild conspecifics. These character-

istics encompass two main areas: the deterioration or absence of certain survival skills, and a tendency to interact with humans and to regard them as a reliable food source.

Deterioration of survival skills comes about because the needs of captive animals are provided for in such a way that they do not need to use or practice these skills as they would in the wild. Readily available food provided on a scheduled basis precludes the use of foraging techniques. The confines of captivity limit the use of navigational skills and make predator avoidance unnecessary. Enforced social groupings may not allow the full range of communication and social skills required for acceptance into a wild social group. Animals are rarely allowed a normal movement range or the opportunity to engage in extensive aerobic activities, so that levels of aerobic fitness are sometimes lower in captive animals than in wild ones.

Humans come to be associated with the provision of food, either through training practices that use food as positive reinforcement or daily feeding schedules in which no training is required but food is supplied. Further, captive animals become habituated to the presence of humans in close proximity and lose much of the natural wariness of human activities that is often evident in wild animals.

It is essential to address these consequences of captivity when planning a release project. To achieve a successful release, an animal will likely need all of its natural skills. Furthermore, and insofar as a release project is designed to reintroduce an animal to distinctively wild conditions, a released animal should no longer seek interactions with humans or associate them with food and protection.

The scientific literature contains criteria for successful release and a variety of guidelines to help meet those criteria. (See, for example, Beck et al. 1994, Brill and Friedl 1993, Campbell 1980, Chivers 1991, Kleiman 1989, Kleiman et al. 1994, Ludwig and Mikolajczak 1985). A survey of the literature, in combination with personal experience, suggest that the following elements are likely to enhance the chances of suc-

cessful release and are necessary to measure the success of a release:

- **Careful selection of release candidates.** Not all individuals will have an equal capacity for survival. This point will be discussed further below.
- **Retraining and the enhancement of foraging skills that may have deteriorated in captivity.** This will mean feeding predatory animals appropriate live prey or supplying natural vegetation for herbivores. An animal should not be released until it proves that it can secure and consume appropriate food items. (Adherence to this guideline is not ethically neutral; the feeding of live prey raises difficult questions. However, following Singer's aforementioned distinction between the killing of those animals capable of future-oriented desires and those incapable of them, and noting that live prey come predominantly from the latter class whereas release candidates tend to come from the former, it seems reasonable to suggest that the death of live prey is justifiable in the case of retraining.)
- **De-emphasis of human interaction.** This includes an end to trained behaviors other than those needed for husbandry care. Feeding sessions should involve minimal interaction, preferably with the placement of proper foraging items in the animal's enclosure. All other types of human interaction should cease. Animals should no longer look to humans as a source of food or social interaction. Familiarity with the presence of humans should be discouraged by limiting the presence of humans in the captive enclosure.
- **Increase in aerobic fitness (if necessary).** This will depend on the species, its normal ranging patterns, and the degree of confinement in captivity, which might have led to a reduction in fitness level.
- **Opportunity to practice navigational skills.** This can be accomplished by movement to a larger enclosure equipped with natural vegetation and terrain similar to that found at the release site or by "excursions" into such terrain.
- **Selection of an appropriate release site.** The preferable location would be one in which the animal was

initially captured or, if it was born in captivity, where its closest relatives were captured. Releasing an animal into an historically unfamiliar area may reduce its chances of acceptance into the social group and its ability to cope with climatic conditions and local food resources. Populations may vary both physically and behaviorally in different, geographically isolated areas. For example, although all bottlenose dolphins live in the ocean, there are regional differences in habitat structure, food sources, and climatic characteristics. These elements result in regional differences in dolphin foraging tactics, prey species, and morphology. Basic requirements for the selected release site should include the presence of conspecifics, sufficient resources, and a suitable climate.

- **Examination of information on the species in the wild, preferably from studies of wild populations.**

These data can supply information on food sources, wild social behavior, ranging patterns, and group dynamics. Such information might be useful in selecting the appropriate time of year for release and will aid in setting criteria for deciding whether or not a released animal has integrated properly into a wild population.

- **Health monitoring throughout the rehabilitation process and release.**

This is necessary to ensure that the animal's welfare is maintained. It will also serve as a basis for determining whether or not an animal is adapting adequately to the wild. For example, it serves as baseline data for evidence of stress or loss of condition. Discussions of veterinary considerations and disease risks associated with reintroduction can be found in Woodford and Kock (1991) and Woodford and Rossiter (1992).

- **Preparation for a gentle release.**

This entails relocating the released animal to an appropriate enclosure in the vicinity of the release site for a period of acclimation to the habitat, climate, and photoperiod. The enclosure will preferably be able to be opened to allow the animal free access in the initial release period and to act as a "home base" for the animal to return to for shelter. Further means of "softening" release

include supplementing food sources using forage that can be found locally. Such provision allows for gradual acclimation; to ease the animal into the wild and away from human care with minimal stress.

- **Postrelease monitoring.** Monitoring will indicate whether or not the individual is exhibiting a natural activity pattern and integrating into the environment. It will also inform the caretaker of an animal's inability to cope and can aid in the location of an individual if recapture is required. Without follow-up monitoring there is no way of assessing the success or otherwise of a release. Postrelease monitoring is essential for determining whether or not the caretakers' responsibility to ensure an animal's survival has been met.

- **Planning of alternatives.** Criteria must be set beforehand to determine when the release will be considered successful and under what conditions an animal will be recaptured and returned to captivity. An alternative plan for the recapture and maintenance of the individual must be prepared. In this case, the animal will again be the responsibility of the caretaker, either until it can be released successfully or, if this is not possible, indefinitely. If further release attempts are planned for the animal, criteria must be established to decide when an end should be put to release efforts and the decision made to retain the individual in captivity.

- **Economic feasibility.** If there are insufficient resources to ensure the provision of all the elements essential for a successful release, then release might not be the best option. Resources that would otherwise be spent on a release project might be better spent improving the conditions of captive animals. A review of the costs incurred in a reintroduction project is provided by Kleiman et al. (1991).

Selection of candidates for release

The selection of appropriate candidates for release is important for two reasons. Not only is it necessary to determine the likelihood of a particular animal's capacity to adapt to the wild environment for its own

welfare, but the release of an inappropriate animal might endanger the wild population. The latter is possible under two circumstances: first, if the released individual originally comes from a different locale and genetic stock from that of the population of animals at the release site; and second, if a released animal is a carrier of a disease not commonly found in the wild (it is also possible that a released individual might contract in the wild a disease to which it would not have been exposed in captivity, and to which it has no resistance; Woodford and Rossiter 1992).

We have already suggested that humans have responsibilities to animals and that two of these are a duty to not cause animals unnecessary suffering or death. If an animal was to harm the genetic strength of the wild animals or if it was released from captivity with some disease not indigenous to the wild population, then these responsibilities will have been neglected. Neither Rollin's consideration of the value of life, nor Singer's utilitarianism, nor Regan's understanding of animal rights provides any justification for privileging the freedom of an individual over the ongoing survival and welfare of the wild population.

The second reason to select appropriate release candidates has to do with the individuality of animals. The reasoning applied to the ethical consideration of individual animals on the one hand and groups of animals on the other is not strictly interchangeable. What, then, is the caretaker's ethical responsibility to treat each animal as an individual with a unique history and circumstances? The answer to this question might help to determine whether some individual animals are good candidates for release, whereas others should not be released under any circumstances.

There might be good reasons for discriminating between individuals and deciding on different treatment based on the individual's circumstances, capacities, or specific interests. When applied to the selection of animals for release, this means that all of the animals should be considered equally but it does not guarantee that all will be released or

all kept in captivity. For example, the ability to survive in the wild might well vary from one animal to another depending on the individual's life history, capacity for training, medical history, "personality," length of time in captivity, opportunity for social interaction with conspecifics, and foraging and navigational skills.

The scientific literature on past release projects suggests the mortality rate of released animals to be high (Beck et al. 1991, 1994, Kleiman et al. 1984) and correlated to such factors as captive birth and a lengthy period as a captive. An animal born in captivity is unlikely to have developed foraging tactics and navigational skills, and a long-term captive could have a reduced capacity for regaining and refining survival skills. Individuals that are not properly prepared have a higher chance of suffering stress and losing condition, so that such animals cannot be considered to have the same chance of survival as a short-term captive animal born in the wild. Consequently, to meet ethical responsibilities, the caretaker must discriminate between such groups of animals both in selecting candidates for release and in executing the rehabilitation. The caretaker should never presume that a released animal will cope "somehow." Criteria have already been established in the literature for the selection of release candidates (e.g., Brill and Friedl 1993, Kleiman et al. 1994). Individual animals that fail to meet such criteria are likely to suffer and perhaps die.

Conclusion

We have argued that humans have certain moral duties toward animals. In the case of captives, these duties include providing for their needs and maintaining their welfare. When release of animals into the wild is proposed, it is the responsibility of the caretaker to ensure that each animal has the skills and behaviors necessary for survival. This responsibility does not end until the animal has properly integrated into the wild population and no longer requires or seeks human care and attention.

A variety of release projects has demonstrated certain guidelines and

protocols that increase an individual animal's chances of survival. Some of these are: retraining skills, selection of an appropriate release site, postrelease monitoring, and recapture of individuals unable to cope without human care. The selection of candidates for release deserves special attention. Not all animals will have the same chance of recovering appropriate wild behaviors; although all animals should be given equal consideration, not all should be released.

Although release is a means of providing captive animals the opportunity to live freely in a natural habitat, it can also lead to increased suffering and stress or even death. If caretakers are to uphold their duties to captive animals, release programs must be carefully and responsibly planned and managed with special attention to the elements described herein. If this is impossible for financial or other reasons, then the proposed release must be deemed unethical and, for the welfare of the animals involved, should not proceed.

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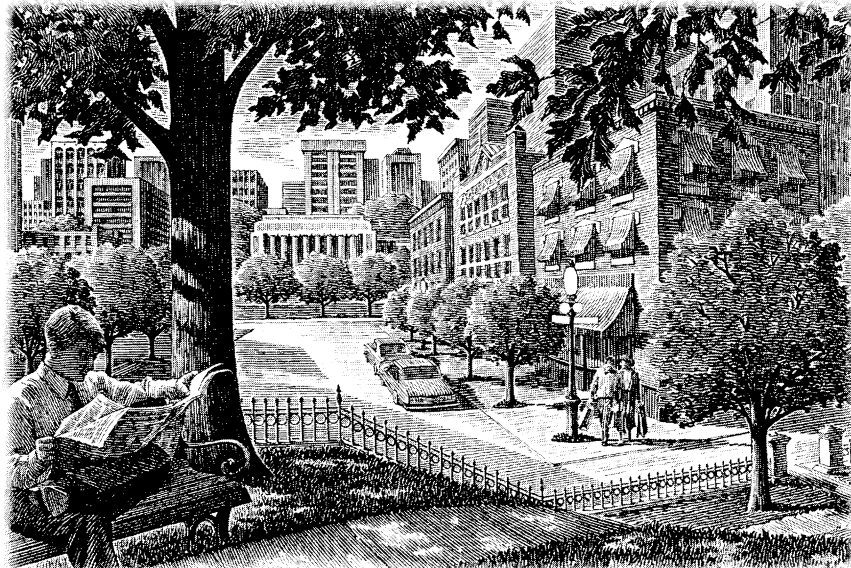
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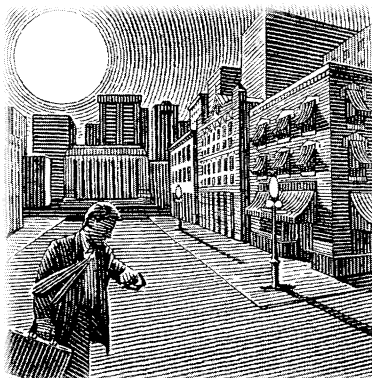
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