Part of Rabbi Joseph B. Soloveitchik’s contribution to twentieth century Jewish philosophy, and indeed philosophy of religion in general, is his celebration of and emphasis upon man’s creative capacities. At the core of the Rav’s thought lies a full blown doctrine of *imitatio Dei*, a religious, spiritual and ethical view which emphasizes activist emulation of the ways of God and, as a corollary, a robust conception of man’s divine-like abilities. However, even the Rav insisted upon another pole to the dialectic. On occasion, passive acquiescence is called for in place of activist emulation, humble retreat instead of bold advance. In “Catharsis,” the Rav claims that:

Halacha teaches that at every level of our total existential experience . . . one must engage in the dialectical movement by alternately advancing and retreating. . . . When victory is near, man must invite defeat and surrender the spoils that he had quested for so long. . . . The dialectical movement, no matter how incomprehensible to modern man, forms . . . the very heart of Halachic living. . . . The Halacha teaches man how to conquer and how to lose, how to seize initiative and how to renounce, how to succeed, how to invite defeat, and how to resume the striving for victory.

Consequently, in considering the issue of genetic manipulation and cloning, we are faced with a general question about the scope of the reli-
gious legitimacy of man’s drive to “control nature.” What are the criteria for negotiating the dialectic, for shifting from one pole to another?

In addition, the questions before us regarding new forms of biotechnology raise their own specific philosophical and religious intuitions. Consider for a moment the nightmare scenario: Having perfected techniques of genetic engineering and having armed themselves with complete knowledge of the human genome, scientists and clinicians begin offering parents the opportunity to engineer their children. Parents begin to design children for physical appearance, strength, intelligence, and, given the genetic basis of much of personality, even psychological makeup and character. In one variant of the nightmare, the human race begins to acquire an ever more homogeneous appearance and personality. In another, throw in cloning and imagine a Brave New World scenario, where human beings with particular capabilities are manufactured for specific social and economic niches. While these scenarios are unlikely if not absurd, like any thought experiment they elicit and force us to confront our philosophical, theological and religious intuitions. They should make us realize that there is a way that God means for the world and humans to be, that human beings can overstep their bounds, and that we are closer than ever to the moment for sounding the signal for retreat.

Finally, we must also hold in hand a famous passage of Ramban regarding Lev. 19:19. In arguing for the rational basis of the prohibition of *kil‘ayim*, forbidden mixtures, Ramban argues that the structure of the world as intended by God involves the self-sufficiency of species. This is closely linked with a) the immutability of species and b) the process of sexual reproduction. Consequently, one who engages in crossbreeding and produces beings incapable of sexual reproduction:

changes and defies the work of creation, as if he thinks that the Holy One . . . has not completely perfected the world and he desires to help along in the creation of the world by adding to it new kinds of creatures.

In his comments here and elsewhere in his commentary on the Torah, Ramban expresses a theory of natural law according to which the will of God is manifest in our world in two fashions. On the primary level, there are the laws of nature, the immutable bedrock that only God can affect. Consistent with these laws, there are many possible variant paths that nature can take. Nevertheless, on the secondary level there exists a divinely preferred path. Ramban refers to this as the “customary and simple nature of the world which is the Creator’s desire.” One who engages in crossbreeding or, for that matter, any of the various forms of
magic, pushes nature from its simple preferred path, and thereby suborns the natural order, contradicts the will of God, and usurps the role of the divine. What emerges is that the scientifically possible or physically possible may still violate natural law—the will of God expressed in the standard functioning of the world.

Even if genetic engineering does not technically fall under the prohibition of *kil'ayim*, Ramban’s comments and theory of natural law remain pertinent and crucial to our discussion. Genetic engineering, the creation of transgenic organisms and cloning, a process by which we would create monogenic organisms with one “parent,” devoid of the genetic variation provided by meiosis in standard sexual reproduction, seemingly violates both the simple preferred path of species-organism integrity and the simple preferred path of sexual reproduction. The latter process involves two sources of genetic material, as opposed to asexual reproduction, which involves only one.

Halakhah’s relationship to scientific medicine, therapeutic intervention to combat disease and prolong life, might very well provide a paradigm for dealing with the threefold set of considerations raised so far. Like genetic manipulation and cloning, the practice of medicine can be construed as suborning the natural order and contradicting the will of God. After all, in the natural way of things, people get sick and die, either as a matter of the simple preferred path of nature, or as a result of divinely ordained reward and punishment. Nevertheless, despite the possible support of certain biblical and talmudic texts for a quietist orientation that accepts disease as the will of God and eschews therapeutic intervention, the Halakhah has explicitly advocated activism in this instance and consistently endorsed the practice of medicine. The Talmud explicitly deduces the physician’s license to heal from the doubling of the Hebrew stem for “heal” in Exodus 21:19 (see *Bava Kamma* 85a). Furthermore, the practice of medicine is not only permitted, a *devar reshut*, but on the consensus account constitutes the fulfillment of a positive divine command; it is a *devar mizvah*.

The problem of course is: what of the theology of natural law, and the problem of suborning the natural order and contradicting the Divine will? In fact, this tension is negotiated implicitly in the Talmud. As Tosafot already point out, the fact that a biblical verse is necessary to teach the permissibility of medical intervention raises the very specter of prohibition. Hence, according to Tosafot and other commentaries, the talmudic discussion concerning Exodus 21:19 should be interpreted as follows: a) One might have thought that the practice of medicine vio-
lates the *gezerat ha-melekh*,\(^\text{11}\) the decree of the king, i.e., the divine will, and is hence prohibited. b) *ka mashma lan*, the verse teaches that no prohibition exists.

The nub of the matter is the conceptual underpinning of the move from (a) to (b) in the Talmud. One might postulate two possibilities. In the first, the conclusion rejects the premise of the problem. Disease is in fact not the “will of the king.” Consequently, the practice of medicine neither contradicts the divine will nor usurps the divine prerogative and is therefore permissible.\(^\text{12}\) The tension is dissolved.\(^\text{13}\) Alternatively, one might claim that the conclusion preserves the premise of the problem. Despite the existence of the “decree of the king,” the preferred path of the natural order or even a particular divine decree, man is permitted to interfere, and nay, obligated to intervene. As Rabbi Moshe Feinstein has pointed out,\(^\text{14}\) the practice of medicine might be compared to the numerous biblical examples of praying against a divine decree or plague. One is sometimes permitted and even obligated to act in a fashion that apparently suborns the natural order and contravenes the divine will. One is required to live and proceed within the tension.

If we adopt the latter approach, we are faced with the accusation of avoiding the question. How can there be license to act in a fashion that apparently suborns the natural order and contradicts the divine will? The answer lies in the *miẓvah* quality of the act in question. It is precisely the fact that the act in question alleviates human pain and suffering, that it heals, that it saves life—that it constitutes, to utilize the terminology of the Halakhah, a *zorekh*, a valid individual or communal need—that grants the license. Valid need obligates one to act in a way that apparently suborns the natural order and the divine will.

Given the above paradigm, we are left with the following broad criteria for performing the tenuous balancing act between activist emulation of the ways of God and a passivist humble retreat, for negotiating the tension between, on the one hand, utilizing technology to control our environment, and, on the other, suborning the natural order and contravening the divine will. When human creative capacities, ingenuity and technology are utilized to alleviate human suffering or to improve the human condition even in the broadest sense, our actions are permitted, perhaps mandated, and constitute a full-fledged accomplishment of the religious ideal of *imitatio Dei*. However, in the absence of these or other clear and ethically appropriate benefits we must consider sounding the clarion call of retreat lest we contradict the divine will and usurp the divine prerogative.\(^\text{15}\)
As far as practical application of the paradigm sketched above to the question of genetic manipulation and cloning, without even the suggestion of rendering a halakhic opinion, I would advocate a distinction between non-human and human contexts. In plant or animal contexts, the application of the emerging techniques seems to be broadly connected to improving the human condition. Even the famed “Dolly” is intended as a model for future transgenic “insulin factories” for diabetics. As such it would seem that these developments seem permissible and praiseworthy from a Jewish perspective.

As regards the application of these techniques to humans, the situation appears more complex. To the extent that these techniques are utilized for gene therapy, to eradicate disease and even to increase the chances for the success of in vitro fertilization, once again the development and application of these emerging technologies is praiseworthy and should be heartily welcomed and enthusiastically endorsed. However, the full fledged cloning of a human being—twinning, the making of a man—seems to meet no valid and ethically appropriate human need and hence to my mind appears theologically problematic. In sum, a situation for voluntary retreat and restraint rather than advance.

Notes

1. This essay attempts to operate within the framework of Rabbi Soloveitchik’s thought. This is due in part to the formulation of the questions and in part to my ongoing interest in the ever exciting thinking of the Rav z”l.

2. See for example: Lonely Man of Faith (New York, 1992), 12-20; “Majesty and Humility,” Tradition 17, 2 (Spring 1978): 33-35; Halakhic Man, trans. Lawrence J. Kaplan (Philadelphia, 1983), 99-101, 105-109. The Rav was of course not the first to sound this note. Regarding emulating God in the mastery of nature see Genesis 1:26-28 and commentary of Saadyah Gaon ad loc. Regarding emulating God’s holiness and ethical behavior see Lev. 19:2, Deut. 28:9, Sotah 14a, Maimonides’ Sefer ha-Mizvot #8, and Guide of the Perplexed III:54. Also see the strange story in Sanhedrin 65b reporting the creation of beings.

3. Tradition 17, 2 (1978): 44. While the Rav here refers explicitly only to what he terms the aesthetic-hedonic, emotional, intellectual, and moral religious realms, the concept at hand is readily applicable to the realm of applied intellect, practical reason, the creative realm of technology and the conquest of nature. As far as interpretation of the essay is concerned, however, see David Shatz, “Ha-Madda ve-ha-Toda’ah ha-Datit be-Haguto shel ha-Rav Soloveitchik,” in Emunah bi-Zemanim Mishtanim, ed. Avi Sagi (Jerusalem, 1996), 325. Shatz notes that in passages of this type, the Rav is not speaking...
about retreat in the creative realm of technology. Shatz takes this as a sign of
a uniquely enthusiastic endorsement of technology.

4. The exact wording of Ramban according to the translation of Charles B.
Chavel in Ramban (Nachmanides): Commentary on the Torah, Leviticus
(N.Y., 1974), 295, is:

   God has created in the world various species among all living things . . .
   and He gave them the power of reproduction enabling them to exist
   forever . . . and He further endowed them with a power to bring forth
   after their kind and that they should never be changed. . . . This driving
   force in the normal mating of animals is for the sake of preserving the
   species, even as human beings engage in sexual activity for the sake of
   having children.

5. See Deut. 18:9 and Ramban’s explanation of the prohibition of divination
and magic. In addition, this two-tiered doctrine of natural law is implicit in
the famed doctrine of providence and nes nistar.

6. The term is minhago ve-tiv’o ha-pashut she-hu efez bore’o. In philosophical
parlance this could be termed “natural law.”

7. See Ex. 15:26, Chronicles 15:12, Berakhot 60a and Rashi, s.v. she-ein. Also see
the striking comment of Ibn Ezra to Ex. 21:19.

8. See Bava Kamma 81b, Maimonides’ Perush ha-Mishnayot, Nedarim 4:4
where healing is considered a fulfilment of hashavat avedah (returning a lost
object), and Ramban’s Torat ha-Adam: Sha’ar ha-Sakkanah, in Kitvei
Ramban ed. C.B. Chavel (Jerusalem, 5724), II, 41-43 where healing is con-
sidered part and parcel of ve-ahavta le-re’akha kamokha, or where the com-
mand is considered implicit in the granting of license. See also, Shulhan
Arukh, Yoreh De’ah 336:1.

9. Bava Kamma 85a, s.v. she-nittenah.

10. See Ramban, Torat ha-Adam, loc. cit. and Commentary on the Torah, Lev.
26:11.

11. This is the Tosafists’ formulation. Ramban’s formulation in Torat ha-Adam
is: Ha-Kadosh Barukh Hu mohez ve-hu merappe. Likewise see Tur, Yoreh
De’ah 336.

12. See Ramban’s comments to Lev. 26:11, Turei Zahav (Taz) to Shulhan Arukh,
Yoreh De’ah 336. This approach maintains that inasmuch as not everyone is
worthy to receive constant Divine providence, one may seek and provide
medical help on the assumption that one operates within the parameters of a
natural world framework and one of reward, punishment and divine decree.
See my comments below. In a different vein see Bayit Ḥadash, Tur, Yoreh
De’ah 336.

13. While attractive, this interpretation fails to grapple with the natural law
argument raised earlier. Disease might not be a matter of Divine providence
in the sense of reward and punishment, but it is part of the way that God
designed the world. Consequently, it seems hard to claim that the conclusion
of the Talmud negates the tension completely.

14. Iggerot Mosheh, Orah Ḥayim 3: #90; and see the critical comments of the
Rav regarding the issue of scientific medicine in Lonely Man of Faith, foot-
note to pp. 88-90 (in the original Tradition article, 51-52).

15. It should be readily apparent that to my mind the theological notions of imi-
tatio Dei on the one hand and the doctrine of natural law on the other stand at odds with each other. What I suggest here is meant as a means for grappling with the problem and not as a resolution of the problem.

16. Some have suggested the use of full scale cloning as a solution to infertility problems or as a “twinning” procedure to facilitate organ donation in the case of tragic death to one twin and organ failure to another. Discussion of these particular scenarios and all proposed variations lies beyond the scope of this paper. Suffice it to say that neither of these scenarios meets the sort of strong criteria for “ethically valid human need” that I have in mind. This is obviously debatable.

17. But see Sanhedrin 65b and the story of the making of a man.