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Forming Bioethics

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Forming Bioethics

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Abstract

Bioethics has become a prominent part of the American landscape. In only a few short decades this interdisciplinary field permeated academia and the public sphere. Despite the recent scholarly effort to chronicle its history, there is still quite a bit of controversy surrounding bioethics' origin and rapid evolution. Bioethics' emergence has already been thoroughly examined through the lens of the potential impact of various events, issues, biomedical and technological developments, and cultural changes. However, there appears to be a widespread neglect of the influence the first texts had on the field. Specifically, the importance of Tom L. Beauchamp and James F. Childress's *Principles of Biomedical Ethics* deserves much more consideration than the limited attention it is given in many of the histories of bioethics. This text, more than any other, gave bioethics the structure it needed to become a recognizable field of inquiry.

Introduction

Few fields have grown as rapidly as bioethics has over the past several decades. What began as a loose, issue-based discourse has evolved into a legitimate field that has gained widespread acceptance in both academia and the public sphere. With the explosive growth and increasing institutionalization that bioethics has experienced in such a short time frame, many of its founding academics have sought to chronicle its history.

The story of the origin and evolution of bioethics has been told in many books, essays, and lectures. Most accounts share a common structure. In general, they tend to define the beginning of bioethics in terms of a crucial catalyzing moment and subsequently emphasize certain landmark events, advances in biomedical technology, and ethical issues that shaped the field thereafter. Despite the considerable amount of attention that has been devoted to chronicling its history, there is still widespread disagreement about bioethics' exact origins. As social scientists Renée Fox and Judith Swazey assert in their own account of the emergence of bioethics, *Observing Bioethics,* the authors of the majority of these histories have been, and still are, "deeply involved in the field."[1] Since each author is documenting and analyzing events not as an outside observer, but as a historical actor, their personal experience and contributions to the field are bound to shape how they interpret its history. Hence, attempting to understand how bioethics emerged as a field of inquiry and eventually became institutionalized requires considering its history as an ongoing academic endeavor.

Another feature that the various histories of bioethics share is the tendency to highlight and review certain influential texts, without fully exploring their impact. Preferring to investigate the growth of bioethics in terms of key events, controversial issues, and gradual cultural change, many authors barely mention the appearance of several books that were meant to provide an appropriate theoretical foundation for bioethics. The lack of attention given to these works is largely due to the fact that none of the frameworks developed in these books became universally accepted by the bioethics community. However, to define the value of these texts in terms of their ability to unify a field as diverse and inclusive as bioethics is to misconstrue their significance. The true importance of the first few bioethics texts lies in the role they played in initiating the process of defining the structure, methodology, and scope of a largely ill-defined field. By promoting reflection on defining an appropriate methodology, these texts catalyzed bioethics' transition from a nebulous discourse to a recognized field of inquiry.

Of all the texts that sought to define a satisfactory theoretical framework for bioethics, Tom Beauchamp and James Childress's *Principles of Biomedical Ethics* was the most successful. This book is considered the cannon of bioethics and is mentioned in practically every account of its history and evolution.[2] Despite its canonical status, why it deserves such distinction and how it shaped bioethics is given the same scant attention that the other early books receive. In this essay, I attempt to demonstrate why *Principles of Biomedical Ethics* is often considered the magnum opus of bioethics. I will also highlight how it, more than any other text, contributed to bioethics' development into the respected academic field it is today. In so doing, I argue that the importance of Beauchamp and

Childress's book lies in the applicability of their methodology to real-life ethical problems, and not the absolute correctness of their theoretical framework.

Disputed Origins

Bioethics began as a public discourse that arose in response to increasing interest in emerging ethical questions related to developments in science, technology, and medicine. [3] The origin of this open and widespread discussion of ethical issues can be traced back to the post World War II era.[4] This was a period where a host of ethical dilemmas in medicine and scientific research were brought to public attention. Not only did these ethics cases grab the attention of the public, they also intrigued many academics. In fact, many scholars chose to leave their parent disciplines of philosophy, theology, and law in order to immerse themselves in the new ethical controversies. It was these migrant academics that became the first bioethicists and who defined bioethics' gradual transition from a disorganized scholarly dialogue to a recognized academic field. Hence, the emergence of bioethics was the result of increasingly pervasive public discussion of ethical concerns and classically trained scholars taking an interest in these practical issues for the first time.

If asked to give a short synopsis of how bioethics began, most bioethicists would provide something akin to the paragraph above. This type of summary certainly highlights some of the most important and well-known features of bioethics' emergence, but it also gives the false impression that there is one, universally agreed upon history of bioethics. As Fox and Swazey convey in *Observing Bioethics,* there are so many divergent interpretations of how bioethics emerged that they can be separated into several different general categories: those driven by technology, those built around issues, those focusing on

events, those based on institutionalization, and those rooted in gradual, multi-causal growth.[5] The plethora of "origin stories" can be partially explained by the fact that those recounting bioethics' history are figures that have been central to its growth and development.[6] Since its history is being told largely by those who have an unquestionable bias, most accounts of the emergence and growth of bioethics must be regarded with some skepticism. Nevertheless, tracing bioethics' transition from a loose discourse to an institutionalized field does not require discounting the historical inquiries published thus far. Simply regarding the analysis of bioethics' beginnings and early history as a work-in-progress will suffice for the purposes of my study.

One of the most common methods of constructing bioethics' history is connecting its origin to particular technological developments, controversial issues, and landmark events. For instance, many bioethicists see the discovery of controversial human experiments such as, the Nazi medical experiments and the Tuskegee Syphilis Study, as crucial to the genesis of bioethics.[7] Specific technological advances in biomedicine are also popular "moments of creation."[8] Bioethicist Albert Jonsen, for example, maintains that the development of the Scribner shunt, a device that made sustained renal dialysis for patients with severe chronic kidney disease possible, set the stage for the beginning of bioethics.[9] For Jonsen, the 1961 creation of a selection committee in Seattle, Washington, that decided which patients would receive life-saving kidney dialysis, marked the birth of bioethics.[10] While bioethics was certainly shaped by a variety of different controversial issues, technological developments, and monumental events, choosing one of these factors as the crucial catalyst is to create a decidedly reductionist history. In addition, seeing bioethics' origin and growth

as purely a reactionary phenomenon is to rely on something akin to technological determinism to construct its history.

Another aspect of the field's beginnings that tends to be presented in a simplistic manner is the origin of the actual term bioethics. In most histories, the coining of the word bioethics is told as a straightforward, factual story. The problem with this type of presentation is that it glosses over quite a bit of controversy.

There are actually two major divergent accounts. One version attributes the coining of the term to American biochemist Van Rensselaer Potter. According to this version of the story, in 1970, Potter created the term bioethics to refer to "the integration of biology and values…designed to guide human survival."[11] His conception of the meaning of bioethics encompassed a broad interconnectedness between the environment, public health, and morality.[12] A second account begins at the home of Sergeant Shriver. As the story goes, in 1970, Andreé Hellegers, the President of Georgetown University, met with Sergeant Shriver and his wife Eunice Kennedy Shriver to discuss the possibility of the Kennedy family's sponsorship for an institute that would study the ethical problems that were appearing in science and medicine. During this discussion, Shriver apparently suggested that the field that this institute would study should be called bioethics, since it was a marriage of biology and ethics.[13] Which one of these two figures invented the term bioethics is hotly debated among scholars.

The histories that present the beginnings of bioethics as a multi-factorial process that occurred gradually over time avoid the methodological pitfalls associated with, what Fox and Swazey call, a "big bang" thesis.[14] Seeing bioethics' emergence as a complex and gradual process is a perspective that a handful of chroniclers share. In addition to Fox and

Swazey, Albert Jonsen, in his book *The Birth of Bioethics,* and social scientist David Rothman, in his book *Strangers at the Bedside*, maintain that the origin of bioethics was a multi-factorial process that took place over the course of a few decades. While these scholars all share a similar historical point of view, there is some variation in the time frame and the combination of factors that each author attributes to bioethics' emergence. A thorough examination of the plausibility, strengths, and weakness of each of their accounts is beyond the scope of this essay. Nevertheless, there is enough general agreement between their accounts to facilitate a broad understanding of how bioethics began and evolved.

Human Experimentation: Catalyzing "Bioethical" Discussion

Concern over ethical human experimentation is an issue that Fox and Swazey, Jonsen, and Rothman all consider significant to the emergence of bioethics. To Jonsen, the discovery of the Nazi medical experiments and the subsequent crafting of the Nuremberg Code in 1947 marked the beginning of bioethics' gradual formation. He sees the years following World War II as the "beginning of an amorphous expression of concern about the untoward effect of advances in biomedical science" and as the beginning of a forty-year period "during which bioethics emerged as a distinct discipline and discourse."[15] Rothman and Fox and Swazey consider the Nuremburg trials to be a premature starting point for bioethics. As Fox and Swazey point out, while some events that were important to the emergence of bioethics did arise in response to the Nuremburg trials, in general, "the Nazi medical experiments and the Code drew little attention."[16] In addition, Rothman explains that the Nuremberg trails earned minimal press coverage and that American researchers

and physicians often found the Code "irrelevant to their own work."[17] Furthermore, few American academics were writing about ethical issues in scientific research and medical practice during the 1950s and 1960s.[18] While the discovery of the grossly unethical Nazi experiments seems like the perfect beginning for bioethics, as bioethicist Arthur Caplan observes: "it simply did not happen that way."[19]

Rothman relates the beginning of public concern over human experimentation to, Harvard Medical School professor, Henry Beecher's 1966 publication of a monumental article in the *New England Journal of Medicine* exposing a host of unethical human experimentation practices in the United States.[20] According to Rothman, Beecher's "devastating indictment of research ethics helped inspire the movement that brought a new set of rules and a new set of players to medical decision making."[21] Unlike the Nazi medical experiments, Beecher's citation of twenty-two examples of investigators risking the lives of subjects without their informed consent created a furor within the medical community and in the public sphere.[22] The controversy sparked by Beecher's exposé and the subsequent revelation of other disgraceful experiments, such as the Tuskegee Syphilis Study, led to a general consensus that research ethics should no longer be left to discretion of individual investigators.

Fox and Swazey both consider the Nazi medical experiments and Beecher's paper to be events that played an important role in initiating bioethics' formation. However, they do not weigh their significance in the same manner as Jonsen and Rothman. Instead, Fox and Swazey prefer to regard these events as a small part of bioethics' initial formative phase. They describe this first phase of bioethics as a period beginning in the 1950s where ethical issues, largely pertaining to human experimentation, were being discussed by scholars

inside and outside the medical community for the first time.[23] It was in this period, for example, that the first symposiums and conferences devoted to human experimentation were organized.[24] Furthermore, while less influential than his 1966 exposé, Henry Beecher outlined his concerns with the prevalence of unethical behavior in medical research in a book titled *Experimentation in Man* and a paper with the same title in the *Journal of the American Medical Association* in 1959.[25] To Fox and Swazey, the relatively limited discussion of human experimentation in the 1950s marked the tentative beginning of what later became pervasive discussion of bioethical issues.

Bioethics: Intellectual Endeavor and Cultural Movement

The period beginning in the 1960s and ending in the mid-1970s is when Jonsen, Rothman, and Fox and Swazey agree that bioethics became a discernible field of inquiry.
It was in this short timeframe that social and cultural change, the implications of advancements in science and technology, and concerns about the rights of research subjects and patients all coalesced into the development of bioethics. While it is nearly impossible to discern precisely how each new issue, landmark event, or scandal affected bioethics' growth and development, tracing a few general trends provides a great deal of insight into its formation. The first of these trends, public concern over human experimentation, has already been partially explored.

By the mid-1960s, the initial concern about human experimentation was no longer an issue that a handful of scholars in the medical community deemed worthy of consideration. During this period, those outside of the medical establishment began to take notice of the pervasive ethical abuses in clinical research. With theologians and

philosophers beginning to examine ethical dilemmas in modern medicine for the first time, a new kind of discussion began to unfold. Joining concerned investigators, such as Henry Beecher, these early bioethicists began to question the applicability of the centuries-old medical ethical tradition[1] to issues like human experimentation.[26]

Most of the early bioethicists' initial critiques of human experimentation dealt with the moral permissibility of general social benefit being allowed to outweigh individual rights and interests. One of the first scholars to raise these kinds of objections was Christian ethicist Paul Ramsey. In his book *Patient as Person*, Ramsey articulated his fear that the medical community's obsession with scientific progress was putting the individual at risk.[27] For Ramsey, the root of the conflict of interest between the "omnivorous appetite of scientific research" and the welfare of subjects was the reliance on a utilitarian cost-benefit analysis.[28] His strategy to address these problems was two-fold. First, Ramsey proposed moving ethical problems in medicine, such as human experimentation, out of the domain of experts and into the public sphere.[29] Second, he called for a commitment to a subject's ability to consent in order to check the power of individual investigators.[30] While Ramsey's book did not provide a comprehensive treatise for ethical human experimentation, his work did articulate a growing concern that those inside the medical establishment could not adequately define an appropriate ethical code for this area on their own.

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[1] Medical ethics has a much longer history than bioethics. Its origin and development is often credited to the Hippocratic writers. Now, medical ethics is often considered a sub-category within bioethics. It is much narrower in scope than bioethics since it usually focuses on the doctor-patient relationship and on the virtues that a doctor needs to be a good practitioner. In addition, medical ethics largely deals with ethical dilemmas that occur in clinical settings. Even though bioethics is the broader term, since medical ethics is often considered to be under the umbrella of bioethics, both terms will be used interchangeably in this essay.

The emergence of interprofessional institutes is another indication that those outside of the medical community were beginning to take interest in its problems. The early activity of the Law-Medicine Institute at Boston University, formed in 1958, serves as an illustrative example. This free-standing institute was designed to address the medicolegal aspects of medicine and public health using an interprofessional approach.[31] While these kinds of interdisciplinary institutions are commonplace today, they were practically unheard of during the late 1950s. Hence, the Institute thought it necessary to choose a research project that would demonstrate the strength of their decidedly "experimental" methodology. [32] The topic that seemed best suited for this task was the legal, moral, and ethical implications of medical experimentation on human subjects.[33] The fact that the Institute chose human experimentation as the subject of their first research project is telling. It shows that conducting a multi-disciplinary investigation of the ethical and legal issues surrounding human experimentation was deemed to be an appropriate venture in the late 1950s. Furthermore, the structure of the Institute's first research project indicates that it was becoming increasingly apparent to academics that biomedical issues that have societal implications, like human experimentation, should be analyzed from a variety of disciplinary perspectives.

The appearance of interdisciplinary symposia also demonstrates the growing academic interest in the ethical issues surrounding human experimentation. For instance, in November of 1967 and September of 1968, *Deadalus* put together a series of conferences titled "Ethical Aspects of Experimentation with Human Subjects".[34] According to Rothman, this was the first time this largely interdisciplinary publication devoted so much careful attention to a medical matter.[35] Rothman also points out that out of the fifteen contributors,

only six "came from the health sciences.[36] The other eleven had backgrounds in law, anthropology, sociology, philosophy, and psychiatry.[37] This series of conferences, and others like it, demonstrates that Ramsey's desire for ethical issues in modern medicine to become part of the public domain was beginning to happen.

The cultural tumult that occurred during the 1960s is another important factor to keep in mind when tracing the beginnings of bioethics. As Fox and Swazey, Jonsen, and Rothman all point out, the cultural changes that began in the 1960s certainly shaped bioethics' formation. To Rothman, the desire to apply principles and the language of rights to human experimentation coincidently fit quite nicely with the social current of the 1960s.[38] This decade, more than any other in American history, was marked by a series of cultural campaigns that sought the abdication of intuitional authority and restructuring of the prevailing social order. For instance, the African-American Civil Rights Movement, and the subsequent human rights movements modeled after it, helped to foster a political climate that was highly sensitive to the rights and interests of socially oppressed minorities.[39] This period was also defined by a general skepticism of authority and powerful institutions. Hence, the notion that researchers and physicians were to be trusted unilaterally because of their expertise and commitment to benevolence was being seriously questioned for the first time in the 1960s. Given the gradual reorientation of social thought that occurred throughout the decade, it is not surprising that the public began to support protecting subjects from the potential harms that could result from investigators failing to respect their individual rights. This climate of political and social change made the philosopher's desire to examine medical issues in terms of guiding principles and individual rights especially alluring.

The increasing involvement of philosophers and theologians in the medical arena became especially apparent by the mid-1970s. The work of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research serves as an illustrative example. Largely in response to the highly publicized scandal that resulted from the discovery of the syphilis studies conducted on uninformed, poorly-educated, impoverished African-American males from 1932 to 1972 in Tuskegee, Alabama, Congress passed the National Research Act on July 12, 1974. With the passage of this legislation, Congress also created the National Commission for the Protection of Human Subjects of Biomedical Research. Its central duty was to "identify the basic ethical principles that should underlie the conduct of biomedical and behavioral research involving human subjects and to develop guidelines which should be followed to assure that such research is conducted in accordance with those principles."[40] This commission included twelve members with a variety of disciplinary backgrounds, including biomedical science, law, sociology, theology, and philosophy. The multidisciplinary nature of this committee is of particular importance. First, the fact only four of its twelve members were affiliated with biomedicine indicates that by the mid-1970s any inclination that human experimentation was an issue to be handled by the medical establishment had disappeared. Second, the presence of bioethicist Albert Jonsen and Christian ethicist Karen Lebacqz indicates that those trained in philosophy and theology were seen as integral commentators on ethical issues by the mid-1970s.

The Commission's final recommendations, complied in *The Belmont Report* in 1979, demonstrate the level of authority over ethical issues that philosophers had gained by the late 1970s. The way in which the guidelines for research with human subjects are

presented in the Report is especially telling. Unlike the vague NIH guidelines for human experimentation that neither required investigators to obtain informed consent in all cases nor offered a practical definition of consent in general, the *Belmont Report* contains a fairly concrete and understandable explanation of informed consent. In addition, this definition of informed consent is explicitly grounded in the principle of respect for persons. The concept of respect for persons is not presented simply as an idealistic platitude meant to evoke notions of liberty and freedom. Instead, this principle is described as a moral requirement that demands explicit acknowledgement of a subject's right of self-determination and an obligation to protect individuals with diminished autonomy. By using the language of rights and obligations and by explicitly appealing to abstract principles, like respect for persons, the *Belmont Report* displays a distinct commitment to applying philosophy to the ethics of human experimentation. Containing the first carefully constructed definition of informed consent, with its moral weight justified in terms of abstract principles, the *Belmont Report* demonstrates that the idea of applying philosophical theory to ethical issues in science and medicine had become an acceptable approach.

While *The Belmont Report* was certainly an important document in bioethics' history, its subject matter is not so indicative of the field's discourse at the time. By the mid-1970s, the prevailing interest in human experimentation had given way to other pressing ethical issues. At this point, Fox asserts, "concern about life and death and personhood issues at the beginning and end of the life cycle, began to take up more medical, philosophical, and legal space in bioethical discussion."[41] To Fox, this shift in focus from human experimentation to issues like abortion, euthanasia, and foregoing life

sustaining treatment marked the second phase of bioethics.[42] Dan Callahan, on the other hand, considers "death and dying, genetics, reproductive biology and population issues, and behavior control" to be the key ethical issues of the 1970s.[43] According to Jonsen, concerns over organ transplantation and the effort of the ad hoc 1968 Harvard Medical School Committee to redefine the definition of death also influenced bioethics discussion in the 1970s.[44] This disagreement over which issues were most prominent during the 1970s illustrates just how expansive beioethics' scope had become.

In addition to an expansion in scope, the 1970s also marked the beginning of bioethics' institutionalization. Two of the field's most influential centers were founded during this period. The first American bioethics center called the American bioethics centers the Institute of Society, Ethics, and the Life Sciences, otherwise known as the Hasting Center, was created in 1969. Shortly after the appearance of the freestanding Hastings Center, another major bioethics center came into existence. In 1971, the Joseph and Rose Kennedy Institute for the Study of Human Reproduction and Bioethics, also known as the Kennedy Center at Georgetown, was established. Just a year after the Kennedy center was born, a third bioethics center called the Pope John XXIII Medical-Moral Research Center, also known as The National Catholic Bioethics Center, was erected in Saint Louis. Besides the recognition these centers provided for bioethics by simply existing, they also gave the developing field a sense of legitimacy by creating scholarly journals. The first bioethics journal, *The Hastings Center Report*, was published in 1971 by, perhaps unsurprisingly, the Institute for Society, Ethics, and the Life Sciences. According to Fox and Swazey, the emergence of the first centers and publications devoted entirely to bioethical issues indicated that "bioethics had arrived" as a recognizable field of inquiry.[45]

The Search for Methodological Unity

The widespread scholarly discussion of ethical issues during the 1960s and 1970s unquestionably played a major role in crystallizing bioethics into a recognizable field of inquiry. However, constructing a discourse around controversial issues was only a tentative first step. Since many of the first bioethicists were migrants from other disciplines, the early bioethics literature had little theoretical or methodological unity. According to Jonsen, the field's early literature was comprised largely of essays, articles, and anthologies devoted to discussing the "current perplexing cases and issues" but offering little "in the way of methodology."[46] The first influential texts were no better. For instance, Paul Ramsey's *Patient as Person* certainly represented one of the first thorough attempts to apply philosophy and theology to dilemmas that were once restricted to the medical community. As credence to the importance and novelty of Ramsey's undertaking, his book dominated the first decade of bioethics.[47] However, it was considered to be severely lacking from a methodological standpoint.[48] Given the lack of unity in the early bioethics literature, searching for theories, frameworks, and methodologies became a major priority. It was this search for a definitive structure that led to bioethics' gradual transformation from a disconnected discourse to a recognized field of inquiry.

Since the first bioethicists had backgrounds in theology and philosophy, their first inclination when analyzing ethical issues was to apply broad, philosophical theories to determine the right course of action. This application of theory marked a distinct departure from previous academic ethics. Throughout its long disciplinary tradition, philosophers were largely uninterested in applying grand theories to real–life ethical quandaries. Instead, those that focused on ethics were generally interested in disagreements at the

metaethical level.[49] By the 1960s, this disciplinary disinterest in practical matters began to erode. One important causal factor of this shift was the growing frustration with the ridged and formal methods of moral philosophy.[50] In addition, many young philosophers were becoming increasingly dissatisfied with the prevailing orthodoxy that restricted the domain of moral philosophy to the analysis and definition of terms such as, "right", "duty", "value", and "good."[51] Yet another crucial factor that pushed many philosophers to consider applying ethics to practical matters was the increasing focus on the limitations of medical ethics. As we have seen, before concerns over the ethical implications of human experimentation became prevalent, medical ethics was restricted to the medical establishment. For the most part, medical ethics was seen as a sort of professional ethics that was developed by physicians and was solely for physicians. Hence, there was a widespread neglect of medical ethics among philosophers.[52] It was the combination of this frustration with the current state of moral philosophy and the increasing public interest in ethical issues that sparked the shift in how philosophers dealt with and related to academic ethics.

As more and more philosophers and theologians left their parent disciplines in order to tackle new and interesting ethical issues, metaphysical language began to permeate the early bioethics discourse. This tendency to apply Western philosophy to public controversies quickly became a defining feature of bioethics. Hence, the desire to move philosophical reasoning out of the academy and to begin applying it in the public sphere was extremely important to bioethics' emergence and early structure.

As we have seen, the 1950s through the mid-1960s constituted a prologue of sorts for bioethics. During this period there was widespread concern about the ethical implications of certain advances in science and medicine, but there was no unified method for analyzing these issues.[53] By the late 1970s, however, these pervasive concerns evolved into careful analyses articulated in the form of books, essays, and lectures.[54] Even after about a decade and a half of commentary on ethical issues, bioethics still did not have any uniform theories and methodologies of its own. When reflecting on the state of bioethics in 1979, Jonsen declared that "the ethics of medicine is now in need not of more anthologies but of a comprehensive treatise revealing how ethical theory can be cogently applied to the sorts of decisions encountered in medical practice."[55] According to another major contributor to bioethics, Robert Veatch, Beauchamp and Childress's *Principles of Biomedical Ethic*s made the first pioneering steps towards providing the "comprehensive treatise" that bioethics needed. [56]

Bioethics' Big Book

The first edition of *Principles of Biomedical Ethics* appeared in 1979. In this book, Beauchamp and Childress made the first real attempt to provide some type of unified approach to bioethics. Before the publication of *Principles of Biomedical Ethics* (hereafter referred to as *Principles*) there was no one approach to bioethics that all bioethicists supported. In constructing their book, Beauchamp and Childress attempted to fill the perceived need for a comprehensive framework that could be applied to ethical problems in modern medicine. The authors did this by providing a "systematic analysis of the moral principles that should apply to biomedicine."[57] In short, they defined four ethical principles

that were inherently separate from medical practice. These four principles are autonomy, beneficence, nonmaleficence, and justice, and they were designed to provide a framework for the identification and analysis of moral problems.[58]

Interestingly, there is some scholarly debate surrounding the origin of the four principles. According to Jonsen, and many of the other chroniclers of the history of bioethics as well, the framework for the four principles was provided by the *Belmont Report*. Since the three principles that were presented in the *Belmont Report* (respect for persons, beneficence, and justice) bore such a striking resemblance to the four principles (autonomy, beneficence, nonmaleficence, and justice) articulated in *Principles,* in both title and content, many bioethics asserted that the Belmont principles must have served as the basis for the four principles.

Beauchamp adamantly disagrees with this assumption. He asserts that "such speculation about origins fails to appreciate that both works were written simultaneously, the one inevitably influencing the other."[59] Beauchamp claims that toward the end of 1975, he and Childress began lecturing and writing on the material that would later become *Principles.*[60] Toward the end of 1976, after he and Childress had been working on the conceptualization of *Principles* for the better part of a year, he became involved in the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.[61] Once he joined the Commission he was assigned to write the Belmont Paper, which later became known by its more recognizable title the *Belmont Report.*[62] According to Beauchamp, before he joined the Commission he was informed that those who attended the Belmont retreat (he was not a member of the Commission when the initial meetings were held) had outlined a "rough schema" of the ethical principles, "respect for persons",

"beneficence", and "justice", but none of the original members of the Commission had given these principles much meaning.[63] Ultimately, Beauchamp was assigned the task of giving "shape and substance" to the Belmont Paper.[64]

The assignment of writing the Belmont Paper was quite a Herculean task. According to Beauchamp, not only had he not attended the meeting at which these principles were discussed, there was also very little content concerning principles in the pre-existing draft.[65] Essentially, Beauchamp was meant to define the general meaning of these principles, ground them in moral philosophy (without being too abstract), and explain how these principles applied to human experimentation. At first this project seemed to be something akin to freshman hazing. Since Beauchamp was an ad hoc addition to the Commission, it seems only natural that he, a philosopher only six years out of graduate school, would be assigned the least desirable task.[66] However, once Beauchamp realized that he could relate the work on defining principles for clinical practice and health policy, with which he and Childress were currently occupied, to the task of explicating the principles meant to govern human research, he "began to be more inspired by the assignment."[67]

Beauchamp maintains that throughout his work on the Belmont Paper, he drew heavily on the materials on principles and theories that he and Childress had gathered for their upcoming book.[68] He also explains that since many of the Commissioners wanted a "minimalist statement relatively free of the style of academic philosophy", he was forced to cut out much "bolder philosophical defenses of the principles."[69] The sections that were removed from the paper did not go to waste. Beauchamp claims he saved the work that was not included in the final version of the *Belmont Report* and refashioned it for

Principles.[70] Much of the work on research ethics that is included in *Principles,* Beauchamp explains, came from his work for the Commission.[71] Hence, it seems as though Beauchamp's experience with expounding the Belmont principles led him and Childress to include an analysis of research ethics that might have otherwise been excluded.

In order to demonstrate that the four-principle system was not an offshoot of his work on the *Belmont Report*, Beauchamp points out that he and Childress had already submitted the prospectus for their book to Oxford University Press by the time the Commission had its first retreat.[72] To further this point, he asserts that once he "grasped the moral vision of the National Commission" he could tell that he and Childress had some fundamental disagreements with their point of view.[73] First, he asserts that an important distinction between the two sets of principles is that the *Belmont Report* only includes three principles, whereas he and Childress identify four distinct principles that are important to medical ethics. According to Beauchamp, he and Childress claim that a crucial part of their framework is the separation of beneficence and nonmaleficence, a distinction that the Commission failed to make.[74] Second, Beauchamp also sees significant differences between the principle of autonomy and the Commission's articulation of the principle of respect for persons. To Beauchamp, the Commission's version of respect for persons seemed to blend two very different principles: the principle of respect for autonomy and the principle of avoiding the causation of harm to incompetent persons.[75]

Whether or not these differences between the two sets of principles are significant enough to justify Beauchamp's conclusion that "the two frameworks are not coherent with one another" is a matter of scholarly debate.[76] Like the debate that surrounds the beginning of bioethics, the origin of the four principles is seen as an important piece of

bioethics history. As is the case with many perceived milestones, there is bound to be disagreement about the arrival of such a canonical text.

The principles that Beauchamp and Childress formulated are meant to be mid-level and thus mitigate between the impracticality of applying high-level ethical theories and the difficulty of prioritizing the different values of low-level common morality.[77] Thus, not only did this book offer the clearly articulated framework that bioethics was previously missing, it also attempted to address the issue of the appropriate balance of theory and practice.

The fact that Beauchamp and Childress offer a system of mid-level ethics is one of the most well-known features of their approach. However, to really understand what is meant by mid-level principles, the terms high-level moral theory and low-level common morality need to be explained. In short, a high-level moral theory is a broad ethical theory that deals with "the standards and principles of moral reasoning."[78] Among bioethicists, moral theories are generally thought to be too difficult to be applied effectively to complicated bioethical controversies because it is too difficult to codify morality into a set of rules united under a single theory.[79]

Common morality, in contrast, is more difficult to define. As defined by Beauchamp and Childress, common morality is "the set of norms shared by all persons committed to morality" and it is "applicable to all persons in all places."[80] A few examples of norms that fall under common morality are "do not kill", "tell the truth" and "do not steal."[81] Thus, common morality is best understood as the norms that all persons deem to be binding without question. However, two problems arise with the norms of common morality. First, as bioethicist S. Holm suggests, it is difficult to show that there really are "norms that all morally serious persons share" and defining common morality in this manner lends itself to

circular reasoning.[82] Second, the norms of common morality often conflict in daily life and it may be difficult to decide which one takes precedence in a given situation. Given the inherent difficulty of using either ethical theories or common morality, looking for some type of middle ground seems logical. This is exactly what Beauchamp and Childress aimed for in *Principles.*

Not only do Beauchamp and Childress advocate mid-level ethics, they also offer principles instead of theories. A principle or moral norm can be thought of as a rule of acceptable moral conduct that is identified or justified by ethical theories.[83] As was previously mentioned, Beauchamp and Childress identified four principles that can be used in practical moral decision-making. At a basic level, the principle of autonomy demands that the decision-making capabilities of a person should be respected. Beneficence can be seen as the commitment to doing good for others. Nonmaleficence is basically refraining from actions that do harm, and justice is best described as the fair, equitable distribution of harms and benefits. In addition to being able to defer to these principles when analyzing ethical problems, Beauchamp and Childress also claim that their principles are prima facie binding. In other words, a principle is applicable to a given situation until it is proven inapplicable or is considered of lower priority to some other principle, norm, or value. These principles are best understood as "action-guides" in a moral dilemma and their application is demonstrated via several case studies, most of which are clinical, throughout *Principles.*[84]

Although Beauchamp and Childress are very adamant about the fact that their approach is not an ethical theory, they do consider theories to be an important justification for their principles. They make their understanding of the relationship between ethical

theories and principles quite clear very early in their book. They claim that "to be justified[2], one's principle's must themselves be defensible" and therefore rooted in philosophical theory.[85] However, Beauchamp and Childress do not argue that their principles must be supported by one ethical tradition. Instead, they claim that their principles can be supported by multiple ethical theories. For instance, even though Beauchamp and Childress each claim to prefer classically opposing ethical traditions, rule utilitarianism and rule deontology respectively, they believe that both of these traditions can be used to justify principles. In examining the metaethical strengths and weaknesses of both theories, Beauchamp and Childress conclude:

> Many forms of rule utilitarianism and rule deontology lead to identical rules and actions. It is possible from both utilitarian and deontological standpoints to defend the same rules…and to assign them roughly the same weight.[86]

Thus, while there may be irreconcilable differences between rule utilitarians and rule deontologists at the metaethical level, the two theories converge at the lower level of principles, which is what matters for a principle-based framework.[87] Furthermore, because Beauchamp and Childress both agree on the same framework of four principles, despite their divergent metaethical proclivities, they argue that there is no need to commit to a single theory when using their system. The fact that multiple ethical theories justify the

[2] Exactly how Beauchamp and Childress's mid-level principles are justified has been a major point of contention. Initially, they claimed that broad theories served as justification for the principles. However, many of their colleagues have asserted that the way in which theory justifies their principles has not been made sufficiently clear. In their latest edition, Beauchamp and Childress have moved away from rooting their principles in philosophical theories and have emphasized the importance of common morality in justifying moral decision making. Although what serves as the ethical justification for the four principles is not so clear, the fact that they are a middle ground between theory and common morality still remains true.

four principles is a critical aspect of Beauchamp and Childress's approach. In many ways this theoretical flexibility is one of the strongest features of their framework.

The scheme that Beauchamp and Childress use to link theory and practice is also worth mentioning. The overall structure of their interpretation of the relationship between theory and practice is explained in a straightforward four-tier diagram. This diagram shows the four hierarchical levels of justification. At the bottom-most level is what ought to be done in a given situation. These actions are rationalized by referencing higher-level moral rules, which are justified by principles that are in turn rooted in philosophical theories.[88] Within this seemingly simple four-tier structure Beauchamp and Childress identify the four principles as the level of justification most useful to dilemmas in medical ethics and to ethical issues in general.

Beauchamp and Childress's framework for bioethics bears striking resemblance to sociologist Robert K. Merton's middle range theory for sociological theorizing. The similarity lies in the way that both parties advocate approaches that mitigate between broad theories and rules that can be derived from mundane daily activity. For Merton, middle range sociological theories are those that "lie between the minor but necessary working hypotheses that evolve in abundance during day-to-day research and the all inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behavior, social organization and change."[89] Not only does Merton advocate a similar relationship between the theoretical and the practical as Beauchamp and Childress, he also portrays his middle range approach as being a means to organize the empirical data obtained in sociological research. For example, in describing the use of middle range theory, Merton explains that the "middle-range theory is principally used in

sociology to guide empirical inquiry."[90] This desire to have a structure for empirical data in sociology is comparable to Beauchamp and Childress's desire to outline a system of ethics that can be used in practical situations. The similarity between middle level principles and middle range theory demonstrates that even fields that are not rooted in moral philosophy share difficulty in moving between theory and practice. Thus, Beauchamp and Childress had the same concerns about bioethics as members of much more established disciplines had about their own methods.

Eventually, bioethicists became so concerned with how to balance theory and practice that significant scholarly attention was devoted to specifying the four principles, in order to make them easier to use in actual cases. As bioethicist David DeGrazia explains in his essay "Moving Forward in Bioethical Theory", the major weakness of Beauchamp and Childress's approach is that it seems to rely on intuition to decide which principle to favor in a given situation.[91] In order to remedy this problem, DeGrazia offers specified principlism as an alternative.

Using Henry Richardson's concept of specifying norms as a guide, DeGrazia claims that a similar procedure can be used to refine the four principles. In short, DeGrazia asserts that through the process of specification, Beauchamp and Childress's four principles can branch out into more and more specific rules and norms depending on the demands of the specific case.[92] Hence, when two principles conflict, say autonomy and beneficence, DeGrazia claims that instead of relying on intuitive weighing and balancing of the principles themselves, one can be revised into a more specific norm that can be used to resolve the conflict.[93] He does offer an additional caveat for this seemingly straightforward process. According to DeGrazia, whenever a principle is specified it must be done in such a

way that "maintains or increases the coherence of the total set of norms found reflectively acceptable."[94] Basically, each time a principle is specified one must make sure the newly refined norm does not contradict other norms in the moral framework. If the specified norm does conflict with other norms, one must be further specified to resolve this clash. Whether or not specification solves the problem of conflicting principles is a matter of considerable scholarly debate. What can be agreed upon, however, is that Beauchamp and Childress have embraced the concept of specified principles and have made an effort to rework their framework to reflect this process.

Competing Theories and Approaches

Other members of the bioethics community, besides Beauchamp and Childless, were also concerned with the proper relationship between theory and practice in bioethics. As has been discussed, Beauchamp and Childress were of the opinion that general theories were too broad to be useful in complex cases. Some early bioethicists, however, did not share Beauchamp and Childress's view that no one theory could unit bioethics. Several pioneering bioethicists felt that bioethics deserved "a more unique theoretical foundation than the routine invocation of standard theories of moral philosophy", but were not ready to disregard the usefulness of theory altogether.[95] Hence, in the midst of bioethics' search for methodological unity, a few bioethicists took up the challenge of creating a single theory for the field.

In 1981, bioethicist Robert Veatch took on the challenge of creating a general theory for bioethics.[96] In his book *A Theory of Medical Ethics*, Veatch "intended to articulate foundations for a general medical ethic that were rooted in philosophical thought."[97]

Veatch was not the only bioethicist to take on this Herculean task. Bioethicist Tristram Engelhardt also attempted to create a central theory for the field. In his 1986 book, *Foundations of Bioethics*, he argued that ethics "could be conceived as an 'enterprise in controversy resolution' which consists of seeking, by free agreement to commonly accepted procedures, to resolve controversies without resort to force."[98] Edmund Pellegrino, a physician, and David Thomasma, a theologian, joined Vetch and Engelhardt in their endeavor. Pellegrino and Thomasma "collaborated on a general theory of medical ethics set firmly on medical beneficence."[99] They articulated their theory in two books, *A Philosophical Basis of Medical Practice* and *For the Patient's Good.*[100] Although all of these books addressed bioethics' need for a discernable structure, none of these theories gained universal support among bioethicists.

The failure of these general theories to gain traction was due to multiple factors. One of the reasons was that even though Veatch, Engelhardt, and Pellegrino and Thomasma all presented theories that offered "valuables insights" into the appropriate philosophical foundation for bioethics, each of their theories had distinct flaws. Veatch's approach was criticized for being too hypothetical.[101] Engelhardt's logic was faulted for being "too morally thin."[102] Pellegrino and Thomasma's model was too "ontological" to gain acceptance in the field.[103] Besides these unique, inherent flaws, there is a secondary, and perhaps more important, explanation for the lack of large-scale acceptance of these theories. Jonsen claims that the lack of enthusiasm for these theories may also be explained by the fact that bioethics tended to focus on practical problems since its very beginning.[104] Furthermore, early bioethicists had often tried to apply theories from their original disciplines to the ethical dilemmas and usually found them to be utterly unhelpful. Since

the application of broad theories to ethics cases already seemed like a dead-end approach for the field, it is not surprising that early bioethicists would be quick to dismiss new theories, even if they were designed specifically for bioethics.

About two decades after Veatch, Engelhardt, and Pellegrino and Thomasma offered their broad theories, Danner Clouser and Bernard Gert presented their version of an appropriate moral theory for bioethics. Since their work appeared after *Principles* had gained quite a bit of acceptance, they framed their theory as an alternative to principle-based frameworks. In a number of articles that appeared during the late 1980s and early 1990s, Clouser and Gert argued that Beauchamp and Childress's four principle schema, which they termed "principlism", constitutes a completely inadequate moral framework.[105] One of the most severe criticisms they offered was that the four principle system "fails to provide a theory of justification or any kind of moral theory that systematically unifies the principles and situates them in a tidy and integrated theory that can handle conflict among principles."[106] After rejecting principlism, Clouser and Gert offered impartial rule theory as an alternative approach for bioethics.

Clouser and Gert's alternative to principlism is based on their conception of a common morality. Common morality, Clouser explains, is often expressed in terms of moral rules such as, do not kill or do not steal, and moral ideals like, help those in need or promote justice.[107] When considered by themselves, these rules and ideals are just the recognizable maximums of morality and simply knowing these rules does not aid one in resolving the confusions and contradictions associated with morality in practice. In order to resolve such ambiguities, Clouser and Gert maintain that it is necessary to refer to ethical theory. To them, the role of theory is to "find the underlying logic" behind the existing

common morality.[108] In addition, they claim that moral theory should show that morality is a "system that impartial, rational persons would find acceptable as a public system that applies to everyone."[109] Hence, Clouser and Gert hold that there is a common morality which is governed by certain impartial moral rules and moral ideals. Beauchamp and Childress have called this approach impartial rule theory.[110]

When there is a proposed exception to a moral rule, Clouser and Gert offer something akin to John Rawls's veil of ignorance to resolve this dilemma. Since morality is a public system, they assert, "a violation of a moral rule is allowed only if a rational, impartial person could publicly allow it."[111] Clouser and Gert advocate a similar procedure for when moral rules and moral ideals conflict. First, one must analyze the situation and determine the morally relevant features. Then, when looking for a solution one is meant to use the same Rawlsian logic that applies to supposed exceptions to moral rules. For Clouser and Gert, their formulation of a common morality that is rooted in impartial rules is much better than principlism at resolving ethical dilemmas because it considers the situation from a much more inclusive point of view.[112]

Like other grand ethical theories, Clouser and Gert's impartial rule theory is plagued by its broadness. For example, the idea that exceptions to moral rules are only allowed when "a rational, impartial person could allow it" nicely articulates the notion that morality should apply to all people in the same way.[113] However, determining one's proposed course of action based on how a "rational, impartial person" would respond to said action is not all that straightforward in practice.[114] In addition, Beauchamp and Childress claim that Clouser and Gert's general rules are not specific enough to be helpful in a complex, real-life situation.[115] In terms of addressing practical ethical issues, Clouser and Gert's impartial

rule theory suffers from many of the same limitations as the bioethics theories that preceded it.

Another effort to provide an alternative to principlism came from Albert Jonsen and Stephen Toulmin in the form of casuistry. In the late 1980s Jonsen and Toulmin sought to revive casuistry as an acceptable approach to moral decision making. According to Jonsen, while he and Toulmin were working for the National Commission for the Protection of Human Subjects they noticed that the task of defining the principles that governed the ethical treatment of human subjects was done after the Commission had offered recommendations based on a number of specific cases.[116] Using this experience as inspiration, Jonsen and Toulmin chose to investigate the history of casuistry and sought to explore if it could serve as an acceptable means to analyze bioethics cases.[117] In their book, *The Abuse of Casuistry,* Jonsen and Toulmin argue that "historical casuistry represented a sound way of thinking about moral problems and that its evil reputation arose from an abuse of its methods."[118] Through their comprehensive study and analysis, Jonsen and Toulmin played a major role in reviving interest in casuistry as an acceptable method of resolving moral problems. Their quest to restore faith in casuistry was so successful that their approach is commonly seen as a major methodological competitor to principlism.

Jonsen and Toulmin's casuistry has a number of interesting features. For one, their approach is an inductive method of moral reasoning. Inductive approaches start at the case level and then work back to principles and theories. This method is one of the most well-defined alternatives to deductive moral reasoning. Deductivism, which has been the primer model among moral philosophers for centuries, relies on referring to a sufficiently well-defined theoretical structure in order to deduce the appropriate course of action in a

given situation.[119] In forming their articulation of casuistry Jonsen and Toulmin completely reject deductivism on the grounds that it fails to capture that nature of moral reasoning and that no deductivist theory can capture all moral ideals.[120]

In practice, casuistry begins with arguably straight-forward paradigm cases. These cases are supposed to be so clear cut that it is obvious which norm indicates the right course of action.[121] For instance, suppose a man is beating his child, without any justifiable cause. Upon observing this scene, any "morally serious person" would conclude that the father's action is wrong.[122] From this case, and others similar cases, it follows that 'violence against the innocent is wrong'.[123] Hence, without referring to any broad philosophical theory or principle this case has enabled the generation of an action guide for moral judgment. Once these moral inferences have been made from paradigm cases, they can be used to "illuminate other cases using argument by analogy."[124] Of all the proposed methodologies for bioethics, casuistry is perhaps the one that is most deeply connected to the study of concrete ethical cases. Given that bioethics began as a discourse focused on interesting ethical dilemmas, it is not surprising that such a case-based approach to moral reasoning has become popular during the last two decades.

As previously noted, many bioethicists see casuistry as a major competitor for the methodological spotlight that principlism has enjoyed. Interestingly, Beauchamp sees principlism and casuistry as compatible moral frameworks. "As I understand him", Beauchamp explains, "Jonsen does not dismiss principles, but he does downgrade them in importance because he thinks moral reasoning starts at a different point."[125] Jonsen seems to agree with Beauchamp's analysis. In his essay "Casuistry: An Alternative or Complement to Principles" he says:

> It should be clear that this casuist…considers casuistry to be complementary to principles. The task of working out exactly what the complement is belongs to moral philosophy (and moral philosophers have been working on it for centuries).[126]

To Beauchamp, the major difference between principlism and casuistry is the flow of moral reasoning. Casuistry begins with the paradigm case and then specifies moral rules and maxims, which can then be used in more difficult situations. According to Beauchamp, the casuist's commitment to the specification of rules and maxims is consistence with his and Childress' method specifying principles to meet the demands of specific cases.[127] Therefore, when it comes to dealing with the practical ethical cases that are so important to bioethics, Beauchamp maintains that casuistry and principlism are fundamentally connected methods of moral analysis.[128]

Popular From the Outset

Unlike other contemporary works, *Principles* quickly became popular among bioethicists. Not long after its publication, the first edition of the *Principles* became "the authoritative text" and "the core of the cannon" that outlined how academic ethics should be applied to medial practice."[129] Reviews of the book often began with statements like "the Beauchamp-Childress volume significantly breaks new ground as a 'systematic analysis' of the moral principles that should apply to biomedicine."[130] In addition, by the time the third edition of the book was published, many were already commenting on the influence that *Principles* had on bioethics. For instance, when discussing the third edition of *Principles*, physician Jonathan R. Sande states, "if it is the case that biomedical ethics has emerged as a new discipline and that a discipline so young can have an authoritative text,

Principles of Biomedical Ethics might be that text."[131] The fact that, shortly after their introduction, the four principles began to permeate writings on medical ethics further demonstrates their influence.[132]

The reasons why *Principles* gained such immediate popularity and why it became the authoritative book for bioethics are rarely discussed in most histories of the field. Most commentators indicate that the book was extremely important and highly influential, but quickly move on to describe its content and the positives and negatives of its approach. So much emphasis has been placed on the content of the book and the philosophical implications of its principles that the question of why it had such an impact has been largely ignored.

The failure of the theories proposed by Veatch, Engelhardt, and Pellegrino and Thomasma to reach the canonical level of *Principles* provides some valuable insight. Part of the reason that *Principles* succeeded where other texts failed is because, as Beauchamp points out, the four principles were never meant to be a full-fledged moral system or theory.[133] Moreover, Veatch, Engelhardt, and Pellegrino and Thomasa all presented some form of the principles of autonomy and beneficence in their works. This suggests that the content of these works was not all that different than that of *Principles.* The major difference between Beauchamp and Childress's approach and work of the others is that their system does not require commitment to a single theory. Thus, acceptance of their framework did not hinge on the consistency of an overarching theory. Since Veatch, Engelhardt, and Pellegrino and Thomasa all presented general theories, acceptance of their theories was in part dependent on their consistency and correctness. By avoiding making

such a difficult theoretical commitment, Beauchamp and Childress's approach was able to gain popularity over the competing theories of other bioethicists.

The primary validation of Beauchamp and Childress's framework is the applicability of their four principles to actual bioethics cases. However, they also offer a secondary justification for the validity of their approach. According to Beauchamp and Childress, not only is it possible to analyze cases without an overarching bioethics theory, there does not even need to be agreement about which philosophical theory justifies each principle. As we have seen, they justify this assertion using their own philosophical backgrounds of rule utilitarianism and rule deontology as evidence. Thus, when using the four principles, bioethicists did not have to commit to a single bioethics theory or agree with Beauchamp and Childress concerning how they justified their principles. None of the other contemporary works could provide early bioethicists with such intellectual flexibility.

Another reason *Principles* was able to have such a lasting influence is because it is what Childress calls a "work in transition."[134] Such "works in transition" are written with "an implicit understanding that new empirical developments will likely require that concepts be adjusted, refined, or further elucidated."[135] According to Walter and Klein, bioethics has been a field built on these works in transition and this is best exemplified by *Principles.*[136] As Walter and Klein argue, although few bioethicists have read all six editions of *Principles*, and may not be completely aware of all the revisions that this work has undergone, "nearly everyone versed in the field has read or been influenced by his work."[137] Thus, one of the reasons *Principles* has become so influential is because it has been revised several times, with all of the revisions taking place as bioethics was forming and evolving. Beauchamp and Childress, therefore, had the unique opportunity to rework

their approach as bioethics grew and changed. This enabled them to take into account the needs of bioethics as it matured. With each new edition, Beauchamp and Childress were able to both refine their approach and address new concerns as they arose.

An interesting aspect of Beauchamp and Childress's continuous revision of *Principles* is the way in which they tend to address criticism. Like many academics, Beauchamp and Childress spend a great deal of time defending their framework from pointed scholarly attacks. However, these two bioethicists have an uncanny ability to take the criticism directed at their approach and rework it in such a way that it can actually be incorporated into the next edition of *Principles.* Bioethicist J.D. Arras uses a rather clever analogy to describe this state of affairs. He compares *Principles* to the Borg from the popular science-fiction series *Star Trek, The Next Generation.* To Arras, the way these "cybernetically-enhanced humanoid drones" travel around the universe in search of new interesting cultures and technologies to assimilate bears a striking resemblance to the way in which *Principles* absorbs all the criticisms that come its way.[138] Arras describes this absorptive process quite nicely:

> No sooner do they [critics] launch a seemingly crippling broadside against the juggernaut of *PBE* from a casuist, narrativist, feminist, or pragmatist perspective than their critique is promptly welcomed with open arms, trimmed of its perceived excesses, and incorporated into the ever-expanding synthesis of the next edition.[139]

Beauchamp and Childress's ability to absorb criticism, while annoying to their opponents, further highlights their commitment to making principlism suitable for a field that is constantly evolving.

In addition to finding acceptance among bioethicists, *Principles* also became popular in medical practice. According to bioethicist Arthur Caplan, the book delivered a "much needed attempt to provide the theoretical framework within which and from which normative assessments and evaluations of clinical behavior in the health professions can be made."[140] Caplan also indicates that the book attempted to "fill a gaping hole in the teaching materials of the field."[141] Before *Principles* was introduced, the usual approach to tackling ethical problems in medicine was a case-based method which considered ethical problems in a specific instance and then attempted to derive rules based on that case that could be applied to similar situations. With the four principles, however, physicians could look at individual cases and use the principles as action guides. Each case could be examined using the same principles, instead of using less rigorously justified rules derived from other cases. Apparently, principlism permeated the medical establishment to such an extent that "invoking the four principles to address medical ethical dilemmas became the standard approach heard on hospital rounds, read in prestigious medical journals, and found in policy reports."[142] Thus, *Principles* served the dual purpose of providing an applicable structure for analyzing ethical dilemmas in medicine and becoming a useful textbook for biomedical ethics.

Criticizing the Cannon

Even though *Principles* is often considered the cannon of bioethics, the text was also heavily criticized. One common criticism of principlism is that it largely excludes theology and religion.[143] Some see morality and moral philosophy as linked to theology and feel

that *Principles* is incomplete without such considerations. Caplan also criticized the book for omitting "the social and historical context in which western morality evolved and is now practiced."[144] Given that the intended audience is healthcare professionals, Caplan argues, such considerations should have been included.[145] He also points out that the book failed to "give any context for ethics itself."[146] Since the health care professionals that the book targets may not have any philosophical background, they would probably want to know how moral considerations should be weighed against other concerns such as, economic repercussions, political agendas, and cultural values.[147]

Besides being criticized for a number of omissions, the book is also faulted for trying to do too much in a single volume. For instance, Caplan claims that attempting "to present the key tenets of moral theory, the methods for the adjudication of moral disputes, an introduction to the nature of clinical medical practice, and the application of moral principles to the analysis of valuational dilemmas in medicine all in the confines of a single book" constitutes an almost impossible endeavor.[148] This type of seemingly contradictory criticism is common in discussions and reviews of *Principles.*

Another criticism commonly directed at *Principles* is that it places too much stress on philosophical theory. For example, Sande claims that the "intentional theoretical orientation of this text" is "distressingly distant from the lived moral lives of patients and health-care professionals."[149] Not only does Sande assert that the theoretical focus of the text hinders its practical effectiveness, he also points out that "the philosophical prose and thick argumentation in the text, may make it difficult to use at an undergraduate level or in schools for health-care professionals, where time devoted to ethics is often minimal."[150] Caplan seems to agree with Sande. He claims that "health professionals and students in the

health professions may find the book too technical and jargon-ridden to be easily accessible."[151] Caplan furthers his point by asserting that "most persons in the health care professions will probably not have the time and the patience necessary to work through all the intricacies and details of moral theory that the book contains, despite the presence of occasional allusions to clinical practice."[152] Despite Beauchamp and Childress's effort to create a text that provides both a thorough introduction to moral theory and principles that can be used in clinical cases, such an endeavor may be too theoretical for an audience of health-care professionals.

While some argue that the approach presented in *Principles* is too complex, others call it too simplistic. For example, Caplan claims that the way Beauchamp and Childress depict ethics as "being a subject characterized by a structure of hierarchically arranged judgments, rules, principles and theories" gives a false impression of simple transitions between these levels.[153] He goes on to assert that this structure may be neat in theory but this type of linearity "is rarely seen in practice, in medicine or anywhere else."[154] In addition, some bioethicists consider the deductive application of principles to cases in the book to be much too simplistic. Although this would probably not be an issue for health care professionals, bioethicists often found portions of the approach delineated in *Principles* to be too simplistic to capture the inherent complexity of real bioethics cases.

While some consider simplicity a flaw, others interpret it as an important aspect of principlism. For instance, Emanuel suggests that principlism is appealing because of its simplicity. He claims that by knowing a small number of principles, nonethicists had a checklist of sorts, which would aid them in confronting the difficult ethical problems they encountered in their professions.[155] The ability of principlism to be simplified for

nonethicists makes it possible for a physician to use the four principles to guide his or her decision-making when facing an ethical dilemma. In fact, Beauchamp and Childress make it particularly easy to use their book in this manner by demonstrating how the four principles can be used in specific cases. According to Emanuel, the way that Beauchamp and Childress " 'explore the content and conflicts' of the principles in specific cases" is "the essence" and "the greatest virtue of the book" because they show the "ethical analysis of particular cases in action."[156] He furthers his point by claiming that, "whether one is a trained ethicist or a health professional or a layperson looking at a particular dilemma, Beauchamp and Childress provide a rich analysis that elucidates its complexities and offers original perspectives and insightful comments."[157] Hence, while many bioethicists consider principlism to be too simplistic, it is this simplicity that makes the approach useful to professionals looking for guidance in making difficult decisions.

As has been shown, despite its appeal, many scholars raised valid criticisms about principlism. However, some of these critiques are specific to the intended user. For instance, Caplan deemed the book too simplistic in its treatment of the hierarchical structure of ethics, yet too complex for practical use by healthcare professionals. Since *Principles* is meant to be used by two very different groups, namely bioethicists and healthcare professionals, if the aspects of the book that are unappealing to one group were completely addressed, then the book would become even more dissatisfying to the other group. In order for *Principles* to be a satisfactory text for both bioethicists and health-care professionals, it needed to find a careful balance between the theoretical and the practical. This is exactly what Beauchamp and Childress tried to do as they revised their work. They continued to rework the philosophical aspects of their framework as bioethicists continued

to criticize it. At the same time, Beauchamp and Childress tried to keep their approach practical enough for it to be useful to health care professionals. Even though bioethicists found flaws in the ethical framework delineated in *Principles,* they still use it when dealing with ethics cases.

Criticized But Still Popular

Besides an accepted theory or framework, a field also requires a methodology. According to Jonsen, a developing field needs a method that enables "its practitioners to order their materials in recognizable ways, to evaluate the relevance of various bits of that material, and to analyze the relationships between those bits."[158] From its beginnings, bioethics was looking for an adequate methodology for applying ethics in a way that is useful in real-life cases. Beauchamp and Childress gave bioethics its first recognizable methodology. By demonstrating how their abstract framework of principles could be applied in ethical dilemmas, Beauchamp and Childress gave bioethicists and professionals an organized means to "identify and reflect on moral problems."[159] Hence, one of the most important aspects of the four principles is the role they played in giving the way in which bioethicists deal with issues a recognizable structure.

The method that stemmed from *Principles*, namely, identifying, balancing, and specifying principles when dealing with difficult ethics case, became so popular that the four principles became the recognizable feature of bioethics. In addition, not only were the four principles quickly adopted in medicine, but since bioethics is also concerned with

controversial issues like abortion, the right to die, and human stem cell research, they also began to appear in public discourse.

The lengthy legal battle and highly publicized controversy that surrounded the Terri Schiavo case serves as an illustrative example. In the Schiavo case, which lasted from1998 to 2005, the public was exposed to a real life ethical dilemma where principles were in conflict. Some of the conflicting principles can be seen from the basic detail of this case. Since Schiavo was declared to be in a persistent vegetative state she had lost the capacity to make autonomous choices concerning her treatment. This led to a conflict between her husband, advocating for her removal from life support, and her parents, who were fighting to keep their daughter on the life sustaining machines. The conflict between both parties brought up questions of who had the right to decide Schiavo's fate for her. In addition, this dilemma put the doctors in the difficult position of being asked to remove a life-sustaining device, which would violate the principle of nonmaleficence. Intricate discussion of this case would require much more attention than can be given here, but the few principles that have been shown to conflict in this case exemplify the way this approach found its way into public discourse.

Another way principlism shaped bioethics was by enabling it to move into the classroom. Once bioethics had a recognizable methodology, it could be taught to those outside the field. The first place bioethics was taught was in medical schools. This is not surprising given that physicians often grapple with ethical dilemmas on a daily basis. After bioethics infiltrated medical schools, graduate programs began to appear in the mid-1970s, with the first one being established at University of Tennessee in 1974.[160] Professional

programs that targeted doctors, nurses, and educators were also set up during this period.[161]

The opportunity to teach bioethics helped to further refine the field's methodology. According to Jonsen, by preparing courses and syllabi, bioethicists were forced to define abstract concepts, to order issues in a meaningful way, to fit discussions into a logical form, and to push for answers to previously unanswered questions.[162] This task pushed bioethicists to engage with their own methods and to present them in such a way that made sense to those outside the field. Although *Principles* certainly was not the only text bioethicists used to organize their field's tools and methods, it certainly gave bioethicists a framework for how to go about this process since Beauchamp and Childress had to engage in the same task when they wrote and revised their book.

Even after an explosion of literature had been published, bioethics centers had been created, and universities began offering courses, bioethicists continued to feel that their field was suffering from major methodological problems. While *Principles* certainly provided the first widely accepted method for balancing theory and practice, bioethicists began to seriously question its effectiveness during the mid-1980s and 1990s. Many bioethicists felt that despite the constant revision of the book, it still did not solve the problem of how to balance theory and practice in bioethics. Even as late as 1990, bioethicists felt that this was a major issue for the field. In a review of *Principles* published in 1990, Jonsen admits that the relationship between theory and practice is still a vexing issue for bioethics.[163] Thus, even though *Principles* gave bioethics a methodological approach that could be applied in real-life situations, it was still considered to be imperfect.

Conclusion

Principles has shaped bioethics in a number of important ways. As we have seen throughout this analysis, it gave the field some much needed structure, it enabled bioethics to be better taught in medical schools and universities, and it gave bioethics a recognizable mantra in the form of the four principles. *Principles'* popularity and perceived importance had some surprising implications as well. For instance, according to bioethicist Jonathan Moreno, *Principles* has been such a profitable book for Oxford University Press that it has supported the publication of all their other bioethics titles.[164] What can be gleaned from the book's combined profitability and popularity is that there is a perceived need for this kind of work. That is, the bioethics community has found *Principles* to be extremely important, both as a volume to be studied for its own sake and as an impetus for further development. Furthermore, it is evident that the book's success has motivated Oxford University Press to continue to support the growth and evolution of the field by continuing to publish bioethics texts. Hence, *Principles* served as a make-shift foundation that gave bioethics the organization it needed in order to further its development.

The effect *Principles* had on bioethics can be seen most clearly when considered in terms of a Kuhnian paradigm shift. As twentieth century scientific historian Thomas Kuhn articulated in his book, *The Structure of Scientific Revolution*s, science does not move forward in a strictly linear fashion. Instead, its progress can be seen as a series of drastic upheavals, which he called paradigm shifts. While bioethics certainly is not a science, the

concept of paradigm shift helps clarify the initial impact *Principles* had and also provides an explanation for its current stature in bioethics.

Even though the term paradigm is commonly used when analyzing the evolution of fields and disciplines, its definition is vague enough to warrant some attention. In *The Structure of Scientific Revolution*s, Kuhn used it to refer to "accepted examples of scientific practice" such as, laws, applications, and theories, "from which spring particular coherent traditions of scientific research" at a particular time.[165] While Kuhn's original formulation of paradigm was directed strictly at accepted practices in scientific fields, the term is conceived more broadly in some scholarly circles. For the purposes of this essay the term paradigm is defined broadly as a philosophical or theoretical framework that defines the general thought pattern or methodology of a particular field or discipline.

As has been previously discussed, the principle approach emerged when creating an appropriate methodology was a chief concern for bioethicists. Furthermore, many early bioethicists found the theories that preceded principlism to be largely unsatisfactory. Hence, *Principles* appeared at an opportune point in bioethics' history. Bioethicists wanted a method that did not consist of merely applying broad philosophical theories to ethical problems and that is precisely what Beauchamp and Childress delivered. In the sense that the principle approach fulfilled the needs of bioethics during a crucial formative stage between the 1970s and 1980s, it became bioethics' first paradigm.

During the 1970s and 1980s, many bioethicists were content with principlism. The approach certainty had its critics, but by and large it was widely accepted within the bioethics community. According to Beauchamp, principles served as an anchor for the

young bioethics and "contributed a sense that the field rests on something firmer than disciplinary bias or subjective judgment."[166] As bioethics continued to grow, using principlism as a paradigm no longer seemed appropriate. By the mid-1980s, "the adequacy and sufficiency of frameworks of general principles" was being called into question.[167] Once the acceptability of principle-based frameworks was being seriously challenged on a large enough scale, it ceased to be an acceptable paradigm for bioethics. Thus, the mid 1980s marks the beginning of a paradigm shift for bioethics.

As with any paradigm shift there are those who still champion the old paradigm and those who are so dissatisfied with it that they choose to search for a completely new methodology. Perhaps unsurprisingly, Beauchamp and Childress remain committed to their theoretical framework. In recognition of all the criticism it has received, however, they have continually revised it over the last three decades and have made a Herculean effort to address said criticism in the actual text of *Principles*. Other bioethicists such as, Danner Clouser and Bernard Gert, are extremely dissatisfied with principle-based systems and have sought to identify general ethical theories that do a better job of illuminating moral reasoning in practice. Since there is again widespread disagreement concerning how to balance theory and practice, bioethics is currently in a state of methodological upheaval. With the revival of concern about the lack of unity within bioethics, the field is again searching for an appropriate framework.

While the methodology delineated in *Principles* is no longer bioethics' central paradigm, the prominent place it continues to hold in bioethics has enabled the transition to what Kuhn called normal science. Kuhn defined normal science as, "research firmly based upon one or more past scientific achievements, achievements that some particular

scientific community acknowledges for a time as supplying the foundation for its further practice."[168] Admittedly, relating the effort to define a better methodology for bioethics to scientific research is a bit incongruous. However, Kuhn's concept of continuous intellectual effort based on a foundation that is only accepted for a certain time is relevant here. Before Beauchamp and Childress introduced *Principles,* bioethics was disorganized and lacked a unifying methodology. After the four-principle approach was introduced and gained acceptance it became the chief paradigm for bioethics. This brief period is similar to normal science because it was a time when many bioethicists were content to work within the system of principlism. As an increasing number of bioethicists became skeptical of the appropriateness of principlism, some choose to reevaluate this framework in an effort to make it stronger, while others abandoned it entirely. Hence, bioethics is currently looking to enter that stage of "normal science" again since there is still a perceived need to find an appropriate unifying framework.

Having an accepted paradigm is one of the central criteria for forming a field of inquiry. By becoming its first paradigm, *Principles* has invariably aided bioethics in becoming the recognizable academic field that it is today. As Jonsen stated in a review of *Principles*, after beginning as a nebulous discourse, without any unifying theories, tenets, and methods, what bioethics truly needed to move forward was a book that could link the currently interesting questions of biomedicine to the currently accepted approaches of moral philosophy.[169] *Principles* did this. Through their book, Beauchamp and Childress provided the emerging field with a methodology that could be readily taught and employed by practitioners.[170]

The reason that *Principles of Biomedical Ethics* is considered the cannon of bioethics is because it provided the first workable approach that linked moral philosophy to the important issues in biomedicine, while creating a single system that could be used in actual cases. As shown by the vast number of critiques, bioethicists did not, and still do not, completely agree with the practicality or the philosophical soundness of some of the ideas Beauchamp and Childress present. However, whether or not a framework of mid-level principles is the one, correct approach to bioethics is not what makes this book so influential. One of the major reasons that it is given such a prominent place in the history of bioethics is that by being a functional, if imperfect, methodology it helped facilitate the formation of academic departments, bioethics centers, research programs, and undergraduate courses, all of the aspects necessary to become a recognized field. Stated more simply, principlism enabled bioethics to move forward. This would have been impossible with the disorganized structure that defined the first two decades of bioethics. Although bioethicists are far from agreeing on one methodology, there is no doubt that *The Principles of Biomedical Ethics* played a major part in the formation of bioethics.

Notes

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