## THE Clid AN ENCYCLOPEDIC COMPANION

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play-and-learning facilities, representing a U.S. contribution to the evolving field of nonformal education through play. Children's museums are the most common form, with historic roots in museum education. Although usually located outside of residential neighborhoods, these informal education destinations respond to the growing desire of contemporary families for places where they can take time off from the hectic daily round and enjoy hands-on, educationally rewarding, animated play experiences. Vital examples may also be found in Germany, France, Spain, Portugal, and several South American countries with established education-through-art traditions that reach out to schools and urban communities.

The 20th-century international history of parks and playgrounds contains progressive models of playing and learning spaces that are continuing to evolve in response to changing cultural conditions, new realities of family life, and narrow public education curricula. However, many parks systems have yet to embrace new models and are experiencing nonuse of neighborhood parks because they no longer match user needs. Radically new design and management strategies are required to attract families and children and to integrate park use into health-enhancing weekly routines, especially in low-resource communities. Success will require political will, public resources, and new partnerships between government and nongovernmental organizations to bring new breeds of play work and animation into local communities where children live.

Robin C. Moore

**SEE ALSO:** Built Environment, Children and the; Exercise and Physical Activity; Nature, Children and; Play; Sports

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paternity and maternity. Before the law can make any determinations about what rights and obligations children have with regard to their parents or what rights and obligations parents have with respect to their children, it has to confront the basic definitional question: Just what is it that makes someone the parent of a particular child? It is commonly assumed that parenthood is simply a biological fact, and the law does indeed make legal paternity track biological paternity while according the status of legal maternity to the biological mother. But the most arresting feature of the Anglo-American law of parenthood is the extent to which it departs from the facts of nature, assigning legal paternity (and, less frequently, maternity) on nonbiological grounds.

The law's ambiguous relationship to biology can be seen most clearly in the traditional laws of legitimacy and bastardy. Canon law, from which English and American family law evolved, prescribed that procreation take place through a religiously and legally sanctified lifelong monogamous, heterosexual union. The traditional laws of illegitimacy conferred the stigma of bastard on children born to unmarried women and denied them the entire panoply of rights and privileges possessed by legitimate children. Legally, the bastard was considered filius nullius, "the child of no one," which meant that neither the biological father nor anyone else was recognized legally as the father. As a consequence, the illegitimate child had none of the rights-to economic support, property inheritance, the father's last name, and other material and social benefits-that the common law and various statutes accorded to legitimate children. Since it was fathers who were legally obligated to provide these benefits, illegitimate children, bereft of legally recognized fathers, were left either entirely dependent on the goodwill of relatives or, more commonly, destined to live as paupers along with their mothers in addition to being stigmatized and ostracized for their parents' sin. Throughout the "long 19th century" illegitimate children were consistently deemed to have no legal father and were subjected to numerous disadvantages. It was not until the 1960s and 1970s that the traditional laws of illegitimacy underwent serious reform.

The flip side of the laws defining illegitimacy is the longstanding legal presumption of paternity (also known as the presumption of legitimacy or the marital presumption), according to which the husband of a married woman is the father of her children, as a matter of law. One of the oldest laws on the books, found continuously in canon law, English and American common law, and the statute books of every state in the United States, the presumption has been traced back to the Roman civil law maxim pater est quem nuptiae demonstrant (marriage demonstrates who the father is). Throughout most of its history, the presumption of paternity was formulated so strictly that no one but the husband could challenge his paternal status, and even he was limited to claiming a lack of access under the traditional "four seas" exception to the rule (which permitted a husband to deny paternity if he had been "beyond the four seas of England" during the period of the child's conception and gestation); that the wife actually lived apart from the husband and cohabited with the putative father and the husband had no sexual access to his wife; or that illness or physical condition made sexual performance on the part of the husband impossible. As of 2007, the husband's right to challenge the presumption was unrestricted, but neither the putative biological father nor the child had a right to challenge the presumption, and the wife's ability to challenge the presumption and establish the biological father's paternal status, rights, and obligations was continfather—a legal regime effectively denying all parties other than the husband a unilateral right to challenge a presumption. The constitutionality of this regime was affirmed as recently as 1989.

The conception of paternity enshrined in the traditional laws of legitimacy has a curiously ambiguous relationship to the biological conception. On the one hand, the laws of bastardy and the marital presumption clearly rest paternity on grounds other than biology (i.e., on a social role) and often result in departures from the biological facts, so much so that their characteristic pronouncements—"the bastard hath no legal father," "the husband is the father," regardless of whether he in fact sired the child in question—have long been regarded as legal fictions. Defenders of the traditional laws do not deny their fictive nature but claim that the legal fictions are useful rather than spurious. Not only did the marital presumption historically serve the purposes of sparing children the stigma of illegitimacy, limiting the claims of "fatherless children" on state coffers, promoting marriage, and protecting "marital harmony," but the original purpose of the laws of legitimacy, like the institution of marriage on which they are based, was precisely to provide a mechanism for ascertaining the identity of the biological father in the absence of "facts that speak for themselves" or more scientific forms of proof.

Both the presumption of paternity and the laws of bastardy thus reflect a deep commitment to the biological conception of parenthood even as they simultaneously authorize departures from the biological facts and generate an alternative conception of paternity based on participation in a social institution (marriage) and performance of a social role (husband). It might seem, therefore, that the recent development of scientific means of establishing biological paternity would have obviated the need for these ancient laws by solving the problem of proof that they could only partially solve. Indeed, there has been an increasing reliance on paternity tests since they were first introduced in the mid-20th century. Initially, courts were reluctant to base legal judgments of paternity on genetic testing or even to admit such tests as evidence, citing concerns ranging from the possibility of human error and the merely probabilistic nature of the proof to justifications for the traditional modes of "proving" paternity that stood wholly apart from the goal of establishing biological paternity (e.g., preventing children from being "bastardized," protecting established [nonbiological] father-child relationships, ensuring that husbands act as economic providers, discouraging "immoral" sexual behavior). As scientists steadily refined the technology of DNA testing, courts and policy makers exhibited a growing willingness to use it. By the turn of the 21st century, scientific advances succeeded in lowering the costs and improving the statistical accuracy to the point where inexpensive tests are now available that

can prove or disprove an individual man's biological paternity of a particular child with near certitude (i.e., a 99% level of probability). The availability of such highly accurate low-cost tests has led many lawmakers to promote their use in a number of settings, most commonly in the context of paternity suits.

Among the various legal devices used to circumvent the presumption of paternity are a number of newly fashioned judicial doctrines as well as statutory laws that offer protection for psychological or de facto parent-child relationships. Focusing on the performance of caretaking responsibilities and/or the establishment of psychological bonds, the concept of psychological or de facto parenthood has been used by various categories of people, including stepparents, gay partners who participate in raising a child unrelated by blood, and other third parties, to gain parental prerogatives and legal recognition of their parental or quasi-parental status with respect to a particular child, notwithstanding their lack of a genetic relationship. These legal doctrines have also provided biological fathers with a tool for gaining legal recognition of their paternal status and rights and dethroning the presumption of the husband's paternity. Awarding paternal rights to biological fathers because of their performance of a social or psychological role echoes the logic of the "unwed father" cases, a quartet of cases that reached the U.S. Supreme Court in the 1970s and 1980s as part of the broader movement to reform the discriminatory treatment of illegitimate children and unwed parents. These cases (Stanley v. Illinois, 1972; Quilloin v. Walcott, 1978; Caban v. Mohammed, 1979; and Lehr v. Robertson, 1983) all involved challenges to state laws that deprived biological fathers of the right to prevent their child's adoption when they were not married to the mother. Taken together, these cases are commonly read as establishing the principle that "[paternal] rights do not spring full-blown from the biological connection," as the Court stated in Lehr v. Robertson. Instead, they seem to rest paternal rights on the existence of an established relationship.

Adoption is yet another instance where the law appears to have moved away from a biological conception of parenthood toward a social or psychological one. Yet it must be noted that adoption was not an officially authorized practice in American law until the mid-19th century, and even then it was a practice that remained shrouded in secrecy and shame, with the adoptive family forced to mimic the biological family. Like the presumption of paternity, the legal institution of adoption initially aspired to simulate biological paternity (and maternity), exalting genetic bonds as the ideal form of parent-child relationship even as it dispensed with them. It was only in the last few decades of the 20th century that the biological model of adoption was successfully challenged and replaced by more open forms of adoption in which the nonbiological nature of the parentchild relationships established could be openly acknowledged and ongoing connections with, or at least knowledge of the identity of, the birth parents maintained.

New reproductive technologies exhibit the same basic tension between biological and nonbiological conceptions of parenthood. On the one hand, new reproductive technologies clearly reflect the continuing value placed on having biological progeny. Like the new technologies for proving biological paternity, the new technologies for reproducing biologically give people a greater ability to have children who are genetically related to them (and to know that their children are genetically related to them) than people have ever possessed before. These new technologies both reflect and fuel the desire to have genetically related children, and the laws that have developed to enable and legitimate their use likewise reflect the biological model of parenthood. On the other hand, new reproductive technologies are commonly used in situations where at least one of the would-be parents is not biologically related to the child. In the case where a mother uses artificial insemination to have and raise a baby without any partner, no social or psychological conception of parenthood is invoked, but the sperm donor's paternity is legally effaced as it is in the cases where the birth mother has a partner. Thus, artificial insemination challenges the traditional biological conception of parenthood and helps promote the alternative social and psychological conceptions even as it also reinforces the biological model.

Other new reproductive technologies pose an even more profound challenge to the biological conception of maternity and paternity. Surrogate motherhood and other methods of reproduction that involve having one woman supply the egg and another woman gestate and birth the child call into question the very meaning of a biological mother. Is the biological mother the genetic mother? Or is it the one who carries the child, nourishes and shapes it in the hormonal environment of her womb, and gives birth to it? Understandably, the law has generated no clear answers to such questions. And even the answers it has generated in response to new reproductive technologies, such as the seemingly stable principle that sperm donors are not fathers, have been called into question as new social forces arise challenging the current balance between biological and nonbiological conceptions of parenthood.

While some social forces have diminished the strength of the biological model in the law, still others have strength-ened it. Among the social forces that have weakened the traditional biological model are the rise of psychology, which promoted a conception of parenthood rooted in emotional attachment and fostering a child's development (the psychological parent); the fields of anthropology and sociology, which articulated the notion of the social as opposed to the biological parent, rooted in performance of a social role; feminism, which challenged the traditional conception of the family and reinforced psychology's call for valo-

rizing the caretaking role; and other social movements that challenged traditional gender roles and call for the legal recognition of nontraditional families and alternative lifestyles, such as the gay rights movement. Among the social forces that have reinforced the biological model are the new reproductive technologies and the new technologies for ascertaining paternity; the fathers' rights movement, which has sought greater protection for the rights of biological fathers; and to some degree the conservative family values movement, which calls on (biological) fathers to assume the economic and moral responsibilities traditionally ascribed to males. But all of these social forces-psychology, social science, feminism, gender deconstruction, biological science, fathers' rights, and conservative morality-bear an ambivalent relationship to the biological conception of parenthood, as does the law itself. In every field of law that is called upon to make assignments of maternity and paternity, one sees an ongoing contest between the biological conception and alternative views. At the very moment when science has provided an unprecedented ability to overcome impediments to biological reproduction and ascertain biological paternity, it is less clear than ever whether biology is the appropriate basis for defining parenthood.

Nomi M. Stolzenberg

**SEE ALSO:** Child Support; Genetics; Reproductive Technologies; Rights, Parental; Rights, Termination of Parental

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**PATRIARCHY. SEE** Child: Historical and Cultural Perspectives; Family

pediatrics. Pediatrics is the specialty of medical science that encompasses the physical and social-emotional health of children from birth through young adulthood. Pediatric care includes a broad spectrum of health services ranging from preventive care to the diagnosis and treatment of acute and chronic illnesses. Pediatricians are aware of the unique nature of children, who must be approached with an appreciation for their stage of physical and mental development. They also recognize the importance of supporting nurturing environments for children, because their health and welfare are heavily dependent on their family and their community. In order to support children and families, pediatricians provide education about healthy life choices, they participate in their communities to solve problems