of consignors and provide the auctioneer with minimum performance criteria. 175 In addition to safeguarding the consignor's interests, the imposition of potential liability on auctioneers should improve the diligence exercised in their appraisals and assure best efforts in fulfilling their duties.

Reginald Bullock, Jr.

THE LEGAL PROTECTION OF COMPUTER SOFTWARE IN THE PEOPLE'S REPUBLIC OF CHINA*

Introduction

China, as a developing country, depends on technological imports to aid its modernization. The Chinese acknowledge the important role of computer technologies in this modernization process, and are taking steps to increase the quality and availability of computer related imports.2 One of these steps is its attempt to provide improved legal protection for computer software. Many countries have chosen to protect software under their copyright laws,⁸ and the European Economic Community ("EEC") has recently adopted this policy.4 While patent5 and trademark6 laws do exist in China, an internationally acceptable copyright law does not.⁷ The only protection available is in the form of licensing contracts.8 The absence of a structured copy-

¹⁷⁵ See Gilsen & Kraakman, supra note 166, at 598 n.145.

^{*} This Note received the Cardozo School of Law Faculty Award For Best Note, Arts & Entertainment Law Journal and has been submitted to the Nathan Burkan Memorial Competition.

See infra notes 66-69 and accompanying text. See infra notes 66-70 and accompanying text.

³ See infra notes 23-29 and accompanying text.

⁴ Green Paper on Copyright and the Challenge of Technology — Copyright Issues Requiring Immediate Action, COMM. OF EUR. COMM., 172 Final Report, § 5.3.10, § 5.7.1, Brussels, June 7, 1988 [hereinafter EEC Green Paper].

⁵ See infra note 94. 6 See infra note 95.

⁷ Goldberg & Bernstein Proposed Chinese Copyright Law, N.Y.L.J., Sept. 18, 1987, at 1, col. 1, [hereinafter Proposed Chinese Law]. See infra note 89 and accompanying text.

⁸ Until a comprehensive body of statutory protection is enacted, the licensing contract is the only form of protection available for software. Greguras & Foster-Simons, Software Protection in the People's Republic of China (pt. 1), SOFTWARE PROTECTION, June 1985, at 1. One of the primary advantages resulting from licensing contracts is that, in order to protect the value of their licenses, licensees are more likely to be diligent in protecting the underlying software from piracy. The contracts may be structured to provide sellers with a copyright protection equivalent, and may also impose obligations of confidentiality on purchasers of software containing proprietary trade secrets. While parties may contract for confidentiality, a breach of this agreement would be very diffi-cult to detect and, hence, to enforce. Torbet, New Implementing Rules on Technology Import Contracts (pt. 2), E. ASIAN EXECUTIVE REP., June 1988, at 14, 15. See also Copyright in China, infra note 10, at 7. A contract is flexible, and can be adapted to fit many situations. Shrink-wrap licenses are one form of contractual protection now available. Under such an agreement, buyers of personal software packages enter into an implied contract with the copyright holder not to infringe upon certain copyrights specified on the software packaging. Maher, The Shrink-License: Old Problems in a New Wrapper, 34 J. COPYRIGHT Soc'y 292 (1987). The difficulty in proving and tracing, however, raises obstacles which may prevent these legal rights from being enforced. Internal technical mechanisms may be the best means to help control infringement until acceptable laws are enacted. These include "booby traps that self-destruct the software if a new release is not installed in a timely manner," or perhaps installing a "virus" (a mechanism in the program which,

1989]

[Vol. 7:387

right system has created a disincentive for foreign markets to send software to China. Part I of this Note discusses several problems inherent in extending copyright law to protect software. These problems range from disagreement over the definition of a computer program to deciding whether software technology can be categorized within the established forms of intellectual property protection: trademark, copyright, and patent.

Part II outlines the development of copyright in China. It details the status of copyright protection currently available, and describes what the Chinese must accomplish before they are able to draft an internationally acceptable copyright law. The discussion analyzes the inhibiting influence that philosophical, historical, and political factors have had on China's copyright theories. Included are some of the problems resulting from the Maoist era of anti-intellectualism. Although the flagrant abuses which occurred during this period have ended, residual tendencies toward anti-intellectualism remain.⁹ The continuing presence of these factors may result in a limited scope and application of the impending copyright law.

Part III develops two alternatives for legal protection of computer software in China. The Chinese may choose to protect software under their copyright law. They could also develop sui generis 10 legislation, limited to software protection. The benefits and detriments of each will be discussed and measured against each other. This Note suggests that, of these alternatives, copyright is the best choice because of its inherent flexibility and the international acceptance it has attained.

I. Legal Protection for Computer Software: An Introduction to the Problems and Solutions Adopted by Various Countries

The dilemma of extending copyright protection to the rela-

upon a certain event, is activated and will destroy the program) to be triggered upon the creation of more than one or two copies. Because of the anonymity of buyers who become parties to an implied shrinkwrap contract, such contracts do not eliminate the need for technical protection. Greguras & Foster-Simons, *supra* note 8, at 6 (citation omitted).

tively new technology of computer software has generated voluminous writings and worldwide debate amongst scholars, lawyers, and legislators.¹¹ Much of the controversy arises from the fact that a consistent and uniform definition of "a computer program" has yet to be attained. Section 101 of the United States Copyright Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result."¹² The draft of the World Intellectual Property Organization ("WIPO")¹³ treaty for the protection of the computer program defines it as "a set of instructions capable, when incorporated in a machine-readable medium of causing a machine having information-processing capabilities to indicate, perform or achieve a particular function, task or result."¹⁴

The United States Code incorporates the language "directly or indirectly," and therefore encompasses both the object code, that part of a program consisting of binary numbers only intelligible to a computer, as well as the source code, that part of a program which a human being can read. In contrast, the WIPO definition does not incorporate this terminology, and it is unclear

⁹ Gargan, From China, Remembrances of Great Minds Lost, N.Y. Times, Oct. 30, 1988, at A12, col. 3

^{10 &}quot;Sui generis" is a specialized form of legislation which, in this case, would create a form of protection exclusively for software. Simone, Copyright in the People's Republic of China, 7 CARDOZO ARTS & ENT. L.J. 1, 7 (1988) [hereinafter Copyright in China]; Guo, The Berne Union and Developing Countries, With Particular Reference to the People's Republic of China, 11 COLUM. J.L. & ARTS 121, 124 (1986) [hereinafter The Berne Union]; Proposed Chinese Law, supra note 7, at 2, col. 2-3.

¹¹ For examples of various points of view, see Higashima & Ushiku, A New Means of International Protection of Computer Programs Through the Paris Convention—A New Concept of the Utility Model, 7 Computer L.J. 1 (1986); Samuelson, Innovation and Competition: Conflicts Over Intellectual Property Rights in New Technologies, 12 Sci. Tech. & Hum. Values 6 (1987) [hereinafter Samuelson]; Samuelson, Modifying Copyrighted Software: Adjusting Copyright Doctrine to Accommodate a Technology, 28 Jurimetrics J. 179 (1988) (hereinafter Modifying Copyrighted Software); Maier, Software Protection—Integrating Patent, Copyright and Trade Secret Law, 28 Idea 13 (1987) [hereinafter Maier, Software Protection]; Zheng, The Legal Protection of Computer Software and its Trend of Development: A Tentative Discussion, CHINA PAT. & TRADEMARK, Jan. 1987 at 34; Comment, International Protection of Computer Software: The Need for Sui Generis Legislation, 8 Loy. L.A. Int'l. & Comp. L.J. 511 (1986); Comment, Improving the International Framework for the Protection of Computer Software, 48 U. PITT. L. Rev. 1151 (1987).

^{12 17} U.S.C. § 101 (1982 & Supp. IV 1986).

¹⁸ WIPO was established to promote the worldwide protection of intellectual property. The preamble to the WIPO convention states

Desiring to contribute to better understanding and cooperation among States for their mutual benefit on the basis of respect for their sovereignty and equality.

Desiring, in order to encourage creative activity, to promote the protection of intellectual property throughout the world,

Desiring to modernize and render more efficient the administration of the Union established in the fields of the protection of industrial property and the protection of literary and artistic works, while fully respecting the independence of each of the unions

Convention Establishing the World Intellectual Property Organization, July 14, 1967, preamble, 21 U.S.T. 1770, T.I.A.S. No. 6932, 828 U.N.T.S. 3. The treaty for the protection of computer programs has been tabled for the time being.

¹⁴ Perry, The Legal Protection of Computer Software — The WIPO Model Provisions, 1 EIPR 34, 36 (1979)(citing Model Provissions on the Protection of Computer Software, § 1, at (i) (1978)

¹⁵ Karnell, Copyright in Computer Programs— An International Survey, 5 EIPR 126 (1985).

[Vol. 7:387

whether the object code is included. If the WIPO definition is interpreted as not including the object code, the number of programs protected under the WIPO treaty will decrease.

CARDOZO ARTS & ENTERTAINMENT

A further complication arises because computer software has not been unequivocally defined by the international community. Some define computer software as being synonymous with computer programs. Others favor a broader definition that includes the know-how necessary to exploit the computer program.

Further confusion has arisen because the majority of countries which have chosen to protect software under their copyright laws 19 have later expressed reservations about their decisions to do so. The question of whether copyright should apply to software systems stems from the issue of whether software constitutes a "writing" that is protected under the copyright law. Software is certainly not a "writing" in the traditional sense, since it does not exist solely to express an intellectual concept. 20 Computer programs exist to perform a utilitarian function. The only element of writing centered within the program is a series of instructions which express an intellectual concept, but operate to accomplish a task. Software, therefore, is a hybrid creation which combines literary form with utilitarian function. 21

While some scholars consider the hybrid form of software unsuited to the application of copyright law, others draw support for such application under the premise that copyright is a malleable form of legislation, and its definition of protected works can be constantly expanded to encompass new technology.²² Despite this continuing debate, most countries, including Australia,²³ West Germany,²⁴ Japan,²⁵ the United Kingdom,²⁶ the

United States,²⁷ Italy,²⁸ and France,²⁹ have extended copyright to protect computer software. The EEC has also recently agreed to

works and, hence, not copyrightable. This decision was reversed by the three-judge Full Bench in 1984, when the court unanimously decided that the Copyright Act of 1968 protected the source code. Davidson, Greguras & Bahrick, International Software Protection: What U.S. Practitioners Should Know To Protect Their Clients' Interests In Foreign Markets, 2 SOFTWARE & CHIPS 53, 81 (1985) [hereinafter Davidson, Greguras & Bahrick]. Pending disposition by the High Court, the Copyright Amendment Act was passed through the legislature to protect software until the Australians developed a long-term policy for software protection. Id. at 82. The Copyright Amendment Act of 1984 protects computer programs in both source and object codes by including them in the category of literary works. Crisp, The Legal Protection of Computer Software - Recent Developments in Australia, 2 J. L. & INFO. Sci. 53, 58 (1986).

²⁴ In 1985, the West German Federal Supreme Court extended copyright protection to "all components of computer software (computer program, pre-stage material, supporting material)... provided they are the result of a personal intellectual creation according to Article 2(2) Copyright Act." Kindermann, Copyright Protection for Computer Software in Germany: Recent FSC Decisions and the Copyright Revision Act 1985, 6 EIPR 179, 184 (1986) [hereinaster Computer Software in Germany]. The components must also be contained in a preestablished category of copyrightable work, such as a linguistic, technical, or scientific work. Davidson, Greguras & Bahrick, supra note 23, at 92. The same year, the Supreme Court extended copyright protection to computer programs under § 2[1] of the Copyright Act. Computer programs are now considered writings and are therefore categorized as linguistic works. Computer Software in Germany, supra, at 183.

25 Before 1985, computer programs were protected under the Japanese copyright principle, which "protects 'works of authorship' that creatively manifest a thought or feeling and belong within the scope of literature, science, fine art or music." Davidson, Greguras & Bahrick, supra note 23, at 99. Programs in source code were considered sufficiently "manifested" to be granted copyright protection, whereas the object code programs were not considered works distinct from the source code but were viewed as reproductions of the source code. Id. This understanding was articulated in the landmark Japanese case, Taito Co. v. I.N.C. Enterprises Co., decided Dec. 6, 1982. In Taito, copyright protection was extended to an object code stored in ROM. In 1985, the Japanese adopted a series of Amendments to the 1970 Copyright Act, which explicitly protects software. Karjala, The First Case on Protection of Operating Systems and Reverse Engineering of Programs in Japan, 6 EIPR 172 (1988) (citing Law No. 62, adopted June 7, 1985).

²⁶ In the United Kingdom, the Copyright (Computer Software) Amendment Act 1985 provides computer programs and storage with copyright protection. *Reprinted in 3* Copyright Laws and Treaties of the World.

²⁷ In the United States, upon recommendation of the National Commission on New Technological Uses of Copyrighted Works ("CONTU"), the legislature enacted the Computer Software Copyright Act of 1980 ("the Amendment"). "The Amendment revised section 117 and added a new term, 'computer program', to the definitions in section 101 of the Act." Radcliffe, *supra* note 16, at 40.

²⁸ In the Italian case *In re: Unicomp s.r.1. and Italcomputers General Informatics*, computer programs were found to be "a product of the intellect or sciences." Davidson, Greguras & Bahrick, *supra* note 23, at 98.

²⁹ The French copyright law, Law 3 of July, 1985, extends protection to computer software by amendment. Toubol, *The Protection of Computer Programs in France*, 1 EIPR 15 (1986) [hereinafter *Computer Programs in France*]; Law 85.660 of July 3, 1985, J.O. July 4, 1984 at 7495. The law requires that programs be original and expressed in concrete form. A computer program may satisfy the originality requirement if it is established that the programmer chose a unique method to solve the problem. Davidson, Greguras & Bahrick, *supra* note 23, at 88. Because the original French copyright law was closely tailored to the needs of the artists, it is inappropriate in many respects to the protection of computer software. To compensate for this, the French added several provisions "which derogate from the normal legal regime governing literary and artistic property." *Computer Programs in France*, *supra* note 29, at 16.

¹⁶ Radcliffe, Recent U.S. Developments in Copyright Law Related to Computer Software, 2 EIPR 40 (1986). Though most software is protected by copyright, United States patent protection has been extended to some programs contained in software. Bulkely, Will Software Patents Cramp Creativity?, Wall St. J., Mar. 14, 1989, at B1, col. 2.

17 "Know-how" is a term which encompasses "all documentation and other materials

^{17 &}quot;Know-how" is a term which encompasses "all documentation and other materials produced in the course of designing, testing, operating and maintaining computer programs." Kawashima & Greguras, Legal Protection of Software in Japan, INFO. AGE, Jan. 1983, at 24 [hereinafter Software in Japan].

¹⁸ Id.

¹⁹ See notes 23-29 and accompanying text.

²⁰ Maier, Software Protection, supra note 11, at 13.

²¹ Samuelson, Modifying Computer Software, supra note 11.

²² Note, The Expansion of the Berne Convention and the Universal Copyright Convention to Protect Computer Software and Future Intellectual Property, 11 BKLYN J. INT. L. 2, 316 n.155 (1985).

²³ Copyright 'Amendment Act of 1984 (Australia). Computer programs are protected by copyright through an amendment to the Copyright Act of 1968. Until 1984, the fate of copyrightability of software was indeterminable. The case of *Apple Computer Inc. v. Computer Edge Pty. Ltd.* (1983), held that computer programs were not literary

the policy of protecting software within copyright.³⁰

The major international copyright treaties, 31 the Berne Convention³² ("Berne") and the Universal Copyright Convention³³ ("UCC"), are written so that computer software may be protected under their present provisions. However, the issue of whether software is protected under either Berne³⁴ or the UCC³⁵ is still being debated.³⁶ Although WIPO has not made an official decision, the director reportedly³⁷ favors protection within a scheme of neighboring rights.³⁸ Developing countries also favor the neighboring rights approach.

30 See supra note 4.

31 Multilateral copyright conventions to which the United States is signatory also include the Pan American Copyright Convention (Buenos Aires), Aug. 11, 1910, 38 Stat. 1785, T.S. No. 593, 155 L.N.T.S. 179; Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of their Phonograms, opened for signature Oct. 29, 1971, 25 U.S.T. 309, T.I.A.S. No. 7808.

³² Berne Convention Concerning the Creation of an International Union for the Protection of Literary and Artistic Works, Sept. 9, 1886, revised in 1908, 1928, 1948, 1967, 1971, reprinted in 4 NIMMER, supra, at app. 27 (1988); Berne Implementation Act of March 1, 1989 [hereinafter collectively Berne Convention]. The United States is a signatory of the UCC and will accede to the Berne Convention sometime in 1989. On October 20, 1988, the Senate ratified accession to the Berne Convention, 134 Cong. Rec. 16,939-40 (daily ed. Oct. 20, 1988).

³³ Universal Copyright Convention, Sept. 6, 1952, 6 U.S.T. 2731, T.I.A.S. No. 3324, 735 U.N.T.S. 368, reprinted in 4 M. NIMMER, NIMMER ON COPYRIGHT app. 24 (1988) [hereinafter NIMMER], amended by Universal Copyright Convention, July 24, 1971, 25 U.S.T. 1341, T.I.A.S. No. 7868, reprinted in 4 NIMMER, supra, app. 25 (1988) [hereinafter

34 Berne protects a broad range of categories such as "literary and artistic works" including "every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression. ... "Berne Convention, art. 2, supra note 32, at app 27-1. While these categories are arguably far-reaching enough to encompass comuter software, the Berne countries have not yet reconciled their disparate opimons regarding software protection. Telephone interview with Professor Peter Jaszi, Washington College of Law, the American University (hereinafter Jaszi Interview).

35 A list of examples covered under the UCC includes expressions of work relating to the sciences, and its broad range "does not appear to exclude computer software from [its] protection..." Kindermann, Computer Software and Copyright Conventions, 1 EIPR 6,

The UCC, in Article 1, also gives a broad definition of literary, scientific, and artistic works. UCC supra note 33. As with Berne, the range of works protected is arguably farreaching enough to encompass computer software. However, the UCC has been silent on the issue, and is not expected to voice a decision in the near future. Jaszi Interview, supra note 34.

36 Jaszi Interview, supra note 34.

II. COPYRIGHT IN CHINA

SOFTWARE PROTECTION IN CHINA

The paramount role of the computer industry in China's modernization has intensified the focus on the legal protection available for software. While discussions have yet to produce legislation, they have resulted in a framework for software protection.³⁹ Before examining China's specific approach to software, it is necessary to assess the status of China's copyright laws.

Although the Chinese may have acknowledged the existence of property rights in intellectual creations as early as the eleventh century,40 they have yet to enact a copyright law to protect these rights. This resistance⁴¹ may stem from either of two philosophical traditions, both of which work against the notion of private intellectual property: Taoism⁴² and Neo-Confucianism.⁴³ Both

39 See infra notes 66-70 and accompanying text.

41 "Some people don't respect knowledge and are devoid of a sense of law. They think the knowledge created by intellectuals should be owned by the whole people and be introduced to everyone." Yuanchao, Rules to be Issued for Software Firms, quoting Ying Ming, China Daily, Feb. 25, 1989, at 2.

⁴² The cornerstone of Tao is the Supreme Ultimate, also called T'ai-chi. The

an aggregation of perfect abstract forms or principles ["li"]. Particular things of the material world come into being by a process akin to coagulation of matter and then, in due time, dissolve away into the formless basic stuff out of which they appeared. The motive power in this process is provided by the interaction of the inseparable cosmic forces Yang and Yin, of the Five Elements (fire, water, earth, wood, and metal conceived of as elemental forces), and to some extent of Heaven and Earth (also conceived of as forces). Things are what they are (men, women, dogs, cats, rocks, and the like) because of the abstract form, or li, that combines with and shapes the matter, or ch'i, that embodies them, and things of any one category have their individual particularities because of the particular complexities of cosmic forces that happened to govern the combining of form and matter in their particular instances.

C. Hucker, China's Imperial Past 366-67 (1975) [hereinafter Hucker].

While this note discusses the concept of Tao in the context of its role in Neo-Confucianism, it is important to note that the Chinese continue a limited contemplation of Tao through the Taoist philosophy. The romantic and mystical elements of Taoism have deteriorated largely as a result of Communist influence, but at the same time, an "official version" has been promulgated. It "stresses benevolence, patriotism, and pub-

lic service without the mysticism and superstitious practices." Baum, Ancient Taoism in Modern-Day China, Christian Sci. Monitor, Aug. 8, 1988, at 8, col. 2.

43 Neo-Confucianist philosophy arose in the late 900s and remained a dominant philosophy until the fall of the Ching dynasty in the early 1900s. Hucker, supra note 42, at 369.76. The ability of the Ching dynasty in the early 1900s. 362-76. The philosophy stressed the submission of individual desires to the common good. The early Sung reformer Fan Chung-yen's maxim that "the true scholar should

³⁸ Id. "The term 'neighbouring rights' in the narrow sense covers only the rights of performers, producers of phonograms and broadcasting organisations. In a wider sense it also covers other rights similar to copyright, such as the rights in photographs in certain countries, the rights of film producers in certain countries or the rights in first editions of books." S.M. Stewart, International Copyright and Neighbouring Rights, 177 (1983) (citations omitted).

⁴⁰ The early history of copyright in China is the subject of disagreement. During the Song Dynasty of the eleventh century, there is a record of copyright protection afforded to books. C. Zheng, Chinese Intellectual Property and Technology Transfer Law 87 (1987) [hereinafter C. Zheng]. This protection coincides with the advent of printing in China, invented by Bi Sheng during the eleventh century. A book stamp from a book of this dynasty reads: "Printed by the Cheng family of Mei Shan. The Right has been Registered with the Competent Authority. No Reprinting without Authorization is Allowed." Id. at 86 (citation omitted).

1989]

traditions rely upon the notion of Tao, or "The Way," which promotes the idea that an individual's creation of a work is really a part of a larger metaphysical force. Since all people and things are part of that force, the artist's creation is a part of everyone. Therefore, both philosophies are antithetical to the protection of private interests in intellectual property because they suggest that all things which a person may independently create are no more the creator's than the society's. The work is really a part of a work is really a work

This notion of communal ownership is reflected in the Neo-Confucian tradition, where artistic and creative achievements are a fundamental part of one's fulfillment of life on earth.⁴⁷ To attain the Neo-Confucian ideal, the artist had to master calligraphy, painting, and poetry.⁴⁸ Though he may have been called upon to produce an artistic creation, charging money for its production denigrated the inherent value of the product.⁴⁹ The work was to be a benevolent project, which increased the artist's stature and added to the community. The addition of the work to society's pool of artistic creation served the dual purpose of promoting culture and enabling the individual to realize the Neo-Confucianist ideal.⁵⁰

The tremendous political instability during the early twentieth century also thwarted legal development in the area of personal intellectual property rights. After Mao gained power, intellectuals were granted few rights and wielded little political

be the first to become anxious about the world's troubles and the last to enjoy its happiness'" was the basis of Neo-Confucianism's charitable ideal. *Id.* at 364. The philosophy also incorporated "cooperation and mutual help" into village life. *Id.*

The Neo-Confucianists built their ethical systems upon the idea of the Tao. *Id.* They believed that "one's essential identity, or li, is inseparably linked with the Supreme Ultimate." *Id.* at 367.

power.⁵¹ Consequently, intellectual property laws were not given attention.⁵²

While the persecution prevalent during the Cultural Revolution has passed, anti-intellectualism is still a powerful force in China. However, the current Communist leadership has changed its policy toward intellectual property, and is making great strides toward enacting an internationally acceptable copyright law.⁵³ The country is drafting a copyright law which substantially conforms with the requirements of the Berne Convention, so that it may one day become a signatory to that Convention.⁵⁴ Berne requires its signatories to establish a domestic copyright law that grants the same protection as the Berne Convention grants.⁵⁵ The Chinese government has written a number of draft laws to this effect, and it is believed that these laws will be enacted in the near future.⁵⁶

Meanwhile, the Chinese are not entirely without copyright protection. A set of rules which is essentially a compendium of labor and administrative laws regulates compensation for literary works.⁵⁷ Films and sound recordings are protected by a network of regulations and government "policy." Additionally, the

⁴⁴ D. Munro, The Concept of Man in Early China 123-39 (1969) [hereinafter Munro]; Hucker, supra note 42, at 367-68.

⁴⁵ Id. at 123-39.

⁴⁶ Id.

^{47 &}quot;'Confucian individualism' means that the individual must develop his creative potentialities so that he can fulfill 'that particular role which is his within the social nexus.'" Nathan, Sources of Chinese Rights Thinking, in Human Rights in Contemporary China 125, 138 (1986) [footnotes omitted; hereinafter Nathan].

⁴⁸ HUCKER, subra note 42, at 386.

⁴⁹ Id.

[&]quot;The individual must cultivate himself, not for himself, but so that he can contribute to the welfare of family and community." Nathan, *supra* note 47, at 138. When determining whether copyright protects the work, the work's quality is not in issue. H.R. Rep. No. 94-1476, 94th Cong., 2d Sess. 53-56 (1976). In contrast, the Confucian distinguished his "art" from a "craft" by the fact that his work was produced without charge. Artistic creation cultivated his personal growth because he gratuitously produced his work. Those who charged for their work, however, were craftsmen, merely doing a job to enrich their livelihoods rather than their lives.

⁵¹ See generally N. CHENG, LIFE AND DEATH IN SHANGHAI 207 (1987):
Although Communist totalitarianism in China was in essence military dictatorship, from the inception of its power in 1949 the Chinese Communist Party was always careful to keep the gun in the background and to create an impression of civilian rule by persuasion. Political indoctrination was the preferred method used to bend the will of the populace. Only in extreme cases of mass armed uprising in remote areas inhabited by minority races had troops been called out. To use the Workers' and Peasants' Propaganda Teams to overcome the resistance of the Red Guards and restore order by nonmilitary means rather than the speedier method of sending in contingents of soldiers illustrated once more how anxious Mao was to preserve this carefully cultivated image of a benign government.

⁵² The effect of Communism upon the development of intellectual property law has been well documented. See generally Copyright in China, supra note 10. The anti-intellectual attitudes and the anti-rightist movement stifled the development of copyright law. Sidel, Copyright, Trademark and Patent Law in the People's Republic of China, 21 Tex. Int'l L.J. 259, 261-262 (1986). Despite this resistance, there were some forms of protection for authors' rights. Id. During the 1950's, authors' rights were protected by contract. C. Zheng, supra note 40, at 88-90. There is also evidence that the Chinese Ministry of Culture wrote several documents dealing with the copyright law that went unpublished. Id. at 147.

 ⁵³ See generally Copyright in China, supra note 10.
 54 See also The Berne Union, supra note 10, at 125.

⁵⁵ Article 36(2) of Berne requires that any country becoming a member of Berne "will be in a position under its domestic law to give effect to the provisions of this Convention." *Supra*, note 32, at app. 27-28.

⁵⁶ See generally Copyright in China, supra note 10.

⁵⁷ M. Pendleton, Intellectual Property Law in the People's Republic of China: A Guide to Patents, Trademarks and Technology Transfer 39 (1986).

⁵⁸ See Copyright in China, supra note 10 at 16-17 and n.1.

General Principles of the Civil Law include two articles on copyright: under Article 94,59 authors are granted the right to sign and publish their works, as well as to receive remuneration for them; Article 11860 provides redress for infringement.

Claims of infringement may be resolved either through mediation bodies set up by local cultural bureaus⁶¹ or through the judiciary.62 Though reports of court cases are vague, the courts have succeeded in delineating basic parameters of infringement to include plagiarism and profiting from another's work without permission. 63 However, descriptions of what factual situations constitute infringement are scant.⁶⁴ This lack of detailed information, coupled with China's young and inchoate legal system,65 results in the dissemination of information which is difficult to evaluate and interpret. Efficient copyright enforcement may therefore be impeded.

III. COMPUTER SOFTWARE IN CHINA: ITS NECESSITY AND ITS PROTECTION

China has recently embarked upon a quest to become competitive with the most economically powerful countries in the world.66 One of the primary determinants of economic development is technological modernization.⁶⁷ Unfortunately, history has left to the Chinese a troubled and underdeveloped system of science and technology. The government is attempting to rectify this situation by restructuring the country's legal and economic practices.68

396

To facilitate China's scientific modernization, the government has acknowledged the necessity of acquiring sophisticated computer technology.⁶⁹ It has determined that in order to carry out this goal, personal economic incentives⁷⁰ for Chinese scientists⁷¹ must be provided, and legal incentives enacted so that the Chinese may sell technology abroad as well as import it.72

SOFTWARE PROTECTION IN CHINA

highly civilized, prosperous, modern socialist country. . . . To realize this . . . goal, China will firmly carry out the policy of opening to the outside world and extensively develop their cooperation and exchange in economy and trade, science and technology, culture and art with other countries. China will further perfect the socialist intellectual property system with Chinese characteristics.

⁵⁹ General Principles of Civil Law of the People's Republic of China Art. 94.

⁶⁰ Civ. Law Art. 118.

⁶¹ See Copyright in China, supra note 10, at 24-26 (brief discussion of Copyright Dispute

⁶² Jianxin, China's Judicial System for the Protection of Intellectual Property, Chinese Pat. & Trademarks, Jan. 1987 at 7, 9 [hereinafter China's Judicial System].

⁶⁴ See e.g. Copyright in China, supra note 10, app. at 50-53. 65 B. Weng & C. Hsin, Introduction to Chinese Law 87 (1987).

⁶⁶ The Chinese socialist plans of modernization have acquired an exceptional notoriety. Publicized goals such as "The Five Year Plan" rarely succeed, and movements such as "The Great Leap Forward" and "The Cultural Revolution" have had intimidating effects on the Chinese people. Consequently, Chinese citizens move forward with great trepidation and hesitancy. Under their new leader, Deng Xiaoping, the Chinese are once again trying to modernize their society. Deng's plans are essentially conservative, an approach necessary to placate the "old guard" left over from Mao's years, and also to reassure the citizens that this new era of modernization will be administered in good faith. See generally J.K. FAIRBANK, THE GREAT CHINESE REVOLUTION: 1800-1985 (1987) (hereinafter FAIRBANK).

⁶⁷ Paepke, An Economic Interpretation of the Misappropriation Doctrine: Common Law Protection for Investments in Innovation, 2 High Tech. L.J. 55, 57 & n.7 (1987).

The common goal of the Chinese people at present is to build China into a "comparatively well-off socialist country. . . . to build [their] country into a

China's Judicial System, supra note 62, at 10, 53.

⁶⁹ Stepanek, Microcomputers in China, CHINA BUS. Rev. 26 (1984) [hereinafter Microcomputers].

⁷⁰ Personal economic incentive involves a shift from working for the good of the state to working for personal income. This necessitates developing a system of personal property rights. This shift is illustrated by the government's change in policy regarding the principle of equalitarianism. "Although the unequal right afforded capitalists in a capitalist society to control the means of production has been eliminated, 'equal right,' the right of the individual laborer to receive 'back from society exactly what he gives to it,' remains as a form of 'bourgeois right.'" Wu-Ohlson, A Commentary on China's New Patent and Trademark Laws, 6 Nw. J. INT'L L. & Bus. 86, 87 (1984) (citing K. MARX, CRI-TIQUE OF THE GOTHA PROGRAM, reprinted in THE MARX-ENGELS READER 531 (R. Tucker, Ed., 2d Ed. 1978)). In commenting on the place of this "bourgeois right," a document drafted under the aegis of Deng Xiaoping stated that the demands of society require that such right be enforced. "[T]he restriction of bourgeois right can never be performed in isolation from the material conditions and spiritual conditions at the current stage. . . . [W]e cannot deny distribution according to one's work, reject necessary differences and practice equalitarianism. Equalitarianism is not only impossible at present but also impracticable in the future." Id. at 87 n.4, (quoting Some Problems on the Acceleration of the Industrial Development. 12 CHINESE L. & GOV'T. 75, 955 (1979)). See also Copyright in China, supra note 10, at 60. In the United States, "the rationale for protecting copyright, [is] that of encouraging creativity. . . ." Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1254 (3rd Cir. 1983) cert. dismissed, 464 U.S. 1033 (1984).

The primary interest is to promote the 'Progress of Science and the Useful Arts' [U.S. CONST., art. I, § 8, cl.8] by providing society with an ongoing freeflow of information that will contribute to progress. The means for providing this benefit to society is the protection of a secondary interest, that of authors and inventors. . . .

^{. . .} These goals are met by effective legal protection which encourages disclosure of new developments.

Comment, International Protection of Computer Software: The Need for Sui Generis Legislation, 8 Loy. L.A. INT'L & COMP. L.J. 511, 514 (1986). (hereinafter Sui Generis Legislation).

The problem of stimulating innovation is more difficult in a socialist economy because innovation requires the "right to acquire resources, the freedom to negotiate their uses, and sufficient incentives for the risk [the encounter] takes." Pejovich, The Incentive to Innovate Under Alternative Property Rights, 4 CATO J. 427, 429 (1984). Because these requirements are not available in a pure socialist economy, economic development is impeded. State ownership prevents individuals from acquiring resources, and without the ability to control resources, freedom to contract is limited.

In addition to the limitations imposed by China's socialist economy, philosophical tenets also conflict with the notion of providing pecuniary incentives to artists, authors and inventors. See supra notes 42, 43 and accompanying text.

^{71 &}quot;Scientists" is a general term inclusive of inventors and computer programmers, as well as those involved in the hard sciences of biology, chemistry, and physics. 72 Simon, Modernizing Science and Technology in China, Current History, Sept. 1987 at

The Chinese are now attempting to import computer systems from Japan and the United States, 73 but due to the absence of legal protection, foreign software companies will generally sell software to the Chinese only as part of a hardware package.74 Thus, in order to accomplish the objectives of developing domestic capability and importing technology, legal protection of software is crucial. To provide such protection, the Chinese are drafting both a copyright law75 and temporary sui generis protection.76

In developing its copyright law, China receives assistance from WIPO.77 In 1980, when China entered WIPO.78 the Chinese began to develop a copyright law which would be acceptable to the Berne Convention. WIPO is assisting China, 80 through "various meetings, courses and seminars,"81 in the preparation of an internationally acceptable copyright law. China has not yet enacted a copyright law which will enable it to join Berne, and predictions of when this will occur run from June, 198982 to three years from now.83

A number of obstacles to the protection of software still exist.84 First, the current draft of the Chinese copyright

249. See also Gill, Computer Technology Exports Under the Export Administration Amendments Act of 1985: Taking Competitive Advantage of China's Open Door, 10 HASTINGS INT'L & COMP. L. REV. 669 (1987). ("These choices reflect the desire to enter into technology-based industries and to modernize so-called traditional industries and the countries economic infrastructure with the dual goal of reducing foreign imports and expanding exports.")

73 Microcomputers, supra note 69; at 27. "In 1984 alone, Chinese parties imported some 40,000 to 50,000 personal computers, most of them Apple- or IBM-compatible systems." Gill, supra note 72, at 676.

74 Copyright in China, supra note 10, at 17.

75 See supra note 56.

76 Simone, Draft Computer Software Regulations, [1989] 3 IP ASIA 15 (March 17) [hereinafter Draft Regulations 1.

77 See supra note 13.

78 WIPO Notification No. 110, Mar. 4, 1980. "The Convention establishing the World Intellectual Property Organization will enter into force with respect to the People's Republic of China . . . on June 3, 1980." Id.

79 Ying, Legal Protection of Computer Software, 1 RUANJIAN CHANYE ("Software Develop-

80 The preparatory work of the draft copyright law is confidential and, consequently, documentation is unavailable. Letter from Mihaly Ficsor, Director of the Copyright Law

Division of WIPO, to the author (Mar. 1, 1988).

81 Editor's Note, China and Copyright, COPYRIGHT, at 257 (June 1984) (excerpts from Shen and Zhong, An Elementary Introduction to Copyright Law). In May 1982, WIPO offered a two week course in which 150 Chinese participants heard lectures by the Director General and three WIPO staff members. In October 1983, the second WIPO Copyright Training Course for China was scheduled for 1985.

82 Simone, Copyright Law Still Under Consideration, [1989] 3 IP ASIA 16 (March 17).
83 Telephone interview with Michael Keplinger, attorney at the Office of Legislative and International Affairs in the United States Patent and Trademark Office. Apr. 1989.

84 In addition to those problems mentioned in the text, another obstacle facing the Chinese is the impending increase in the requirements of the General Agreement of Tariffs and Trade ("GATT"). The American Bar Association has recently released a omitted a software protection provision to promote widespread report that favors more stringent requirements for the signatories to the International

law85 fails to provide for software protection.86 The drafters

Intellectual Property conventions. This would ensure that "the lack of adequate and effective protection for intellectual property rights [is not] a non-tariff barrier to trade". Rendell, Report on Protection of Intellectual Property Rights Within GATT, 21 INT'L LAW. 1239 (1987) (American Bar Section of International Law and dPractice Reports to the House of Delegates, Reprort by Chairman). GATT would supplement the current conventions, and would codify these more stringent requirements. The possible provisions include:

(i) improving minimum levels of protection for intellectual property rights which signatory nations would agree to implement and enforce both internally and at their borders; (ii) requiring signatories to follow certain rules of behavior designed to make consideration and promulgation of intellectual property rules and procedures more equitable, e.g.; transparency of rule making and adequate provisions for notice; and (iii) establishing dispute resolution and enforcement mechanisms.

In order to raise the requirements for protection of international property in developing countries, the United States is encouraging the incorporation of these standards into GATT during the current "Uruguay Round" (the present negotiating forum for the GATT provisions). Intellectual Property Rights: Global Consensus or Global CONFLICT? Gadbauw & Gwynn, Intellectual Property Rights In the New GATT Round, in In-TELLECTUAL PROPERTY RIGHTS 38, 40 (1988). Developing countries are generally opposed to the inclusion of intellectual property within GATT. Their experience with and understanding of the GATT has impressed them with the idea that "developing countries lacked the bargaining power to negotiate concessions of interest to them and that consequently their interests were not adequately reflected in the results." Id. at 47. GATT countries have reached an agreement in principle as to what the basic issues regarding intellectual property will be. Telephone interview with Emery Simon, Director for Intellectual Property, Office of U.S. Trade Representatives, April 13, 1989. China would have to resolve several other problems before joining GATT. A fundamental assumption of GATT is that trade is "conducted by independent enterprises stimulated by profit motives and responding to market forces." Herzstein, China and the GATT: Legal and Policy Issues Raised by China's Participation in the General Agreement on Tariffs and Trade, 18 L. Pol'y IN INT'L Bus. 371, 374 (1986). The advantages membership confers, namely reduced tariffs and benefits from trade policies of other member countries' trade policies, are granted to those countries with free market systems. The reciprocal benefit is open competition free from interference by governments with centrally planned economies. If China does not make trade-related concessions, it will not receive the benefits which GATT membership bestows. The complications of finding a suitable and satisfactory substitute arrangement are numerous. The additional requirements imposed on intellectual property rights exacerbate the task of working out a compromise and add to the amount of ground the Chinese need to cover in order to catch up with

85 The draft will protect the works of Chinese citizens, "whether published or not, and no matter where they are published." C. Zheng, supra note 40, at 130 (quoting China Daily). Zheng states:

Foreigners will have copyright protection for works first published in China. As for works first published outside China, or unpublished works, protection shall be provided in line with any agreement between China and the country of which the foreigner is a national, or with the international copyright convention to which both parties are members. . . .

The authors shall enjoy both moral and economic rights. Moral rights include the right to make the works public through all legal means; to have the authors' names signed or not signed on their works; to claim authorship; to protect the integrity of their works; to revise their published works; and to make a statement to withdraw their published works. The economic rights include: utilising their works by means of publication, reproduction, recording, performance, broadcasting, exhibition, translation, adaptation or scriptexploitation of software, which accelerates China's technological development. 87 The most recently reported developments in copyright indicate, however, that the anticipated law will eventually include software.88 Meanwhile, the Chinese are preparing temporary sui generis regulations to protect software.89 This change is apparently the result of pressure from the U.S. government and software industry groups "to protect software under copyright law."90 Under the current draft, China's "fair use" doctrine⁹¹ excludes reproductions of works used for educational or research purposes from copyright protection.92 Conse-

quently, even if software is included in the copyright law, many software programs are specifically designed for educational or research purposes and may not be protected. As a result, many computer software sellers are discouraged from distributing their products in China.93

A. Developments in Patent and Trademark Law

Developments in trademark and patent provide insight into how copyright may be integrated into the Chinese legal system. Although the Chinese Patent⁹⁴ and Trademark⁹⁵ laws protect

ing, and to be paid for the use of the author's work by others, except where the law stipulates otherwise, . . .

The limitations on the economic rights are that remuneration may not be paid in cases where excerpts, reproductions or translations of a published work of another person are used only for personal study and research or when published works are used in newspapers, broadcast, television programmes and newsreels for the purpose of reporting current events. Id. at 130-31 (footnotes omitted).

86 Proposed Chinese Law, supra note 7, at 2. "One major deficiency from the U.S. viewpoint is that China has chosen for now not to include computer software among the categories of protected works." *Id.* 87 *Id.*

88 Draft Regulations, supra note 76.

89 Foreign software may be protected under the regulations; however, "only countries which provide reciprocal protection to Chinese software will have their citizens' works protected in China. In addition, foreign software will have to be registered in China in order to enjoy protection." The drafters must also resolve questions regarding "the duration of protection, retroactivity, and the extent to which the regulations will incorporate aspects of copyright law." Id.

91 Copyright in China, supra note 10, at 21.

92 Sidel, supra note 52, at 268 & n. 48. One Chinese legal scholar recommended that "fair use" of copyrighted works include study or research, use in reports and reviews, inclusions in teaching materials, judicial use and noncommercial scientific research, conversion to reading materials for the blind, translation from Chinese to minority languages, news reporting and political education, noncommercial performance by artistic troupes, and noncommercial exhibition.

93 See infra notes 119-23 and accompanying text (sui generis protection proposals). 94 Both contemporary patent and trademark protection began in 1950 with the Soviet-influenced Provisional Regulations on the Protection of the Invention Right and the many areas of computer technology, computer software, arguably one of the most valuable components of a computer system, 96 remains unprotected in China. China's argument is that, as a developing country, it needs free access to software in order to modernize its computer industry.97 Lesser Developed Countries ("LDCs") and developed countries differ as to how and to what extent intellectual property should be protected. Areas of controversy include the compulsory licensing provisions contained in both the UCC and Berne. These provisions were enacted primarily to grant LDCs freer access to the literary works of foreign countries. 98 If either convention extends copyright protection to software, it is questionable whether software would be subject to the compulsory licensing provisions.99

SOFTWARE PROTECTION IN CHINA

Patent Right. In 1954, the Provisional Regulations on Awards for Inventions. Technical Improvements and Rationalization Proposals Relating to Production, also influenced by the Soviets, replaced the 1950 regulations. The 1954 regulations were in turn replaced in 1963 by the Regulations on Awards for Inventions and Regulations on Awards for Technical Improvements, which were amended in 1978. In 1984, the National People's Congress enacted the Patent Law, which was put into effect in 1985. This law exists in conjunction with the 1963 Regulations. The Patent Law follows the European Patent Convention by employing the "first to file" system rather than the United States' "first to invent" system. Pendleton, supra note 57 at 18-19. From April, 1985 to March, 1986, 19,493 patent applications were reportedly filed. Thirty-five percent of the applications were foreign. Horsley, Protecting Intellectual Property, THE CHINA BUS. REV. Nov.-Dec.

95 The history of trademark legislation in contemporary China began with the Sovietbased Provisional Regulation Governing the Regulation of Trade Marks 1950. In 1963, those were replaced by the Regulation Governing the Control of Trademarks. The new regulations were the first to allow foreigners to apply for trademark in China. The 1963 regulations were superseded by the current Trademark Law 1982, adopted by the Standing Committee of the National People's Congress in 1982, and in effect since 1983. Pendleton, supra note 57, at 8-9. The Trademark Office of the State Administration of Industry and Commerce (SAIC) reported that by the end of 1985 127,056 valid Trademarks had been registered in the PRC. Of these, 19,028 were foreign. Horsely, supra note 94, at 17.

96 EEC Green Paper, supra note 4.

97 "China has chosen for now not to include computer software among the categories of protected works. This decision derives ... from a stated position that as a 'developing country,' China must be free to make wide ranging use of computer software in the early stages of its computer industry." Proposed Chinese Law supra note 7 at 2, col.

98 Simone, Protection of American Copyright, in Books on Taiwan, 35 J. Copyright Soc'y 115 at 152-53 (1988).

99 Telephone interview with Professor Peter Jaszi, Washington College of Law, the American University. Although the issue of compulsory licensing is beyond the scope of this note, it is important to note that some countries fear that if China extends copyright protection to software, and if software is found to be within the Berne, China may try to gain access to foreign software under the compulsory licensing provisions. The resolution of this issue depends in part on how software will be classified under the conventions. If software is defined as a literary work which is subject to compulsory licensing, software may receive similar treatment. However, even if the definition of a literary work were broadened to include software, LDCs would have to get around the fact that the compulsory licensing provisions are directed toward permitting LDCs to translate foreign works. Since compulsory licensing of software would not effect this purpose, software may be beyond the scope of the compulsory licensing provisions.

The tension between China, in its guise as a developing country, and developed countries stems largely from uncertainties in predicting China's readiness to pay for computer software once legal protections come into existence. By reviewing how China has enforced its trademark law in current cases involving infringement of such trademarks as "Eveready", "Coca-Cola", and "Disneyland", 100 the extent of China's respect for intellectual property may be assessed.

The Eveready case involved infringement of a United States trademark¹⁰¹ by a Hong Kong businessman who had made arrangements with a company in Hubei, China, to process batteries using the Eveready trademark. The China Council for the Promotion of International Trade ("CCPIT")102 handled the case, and a representative directly requested that the Hubei company stop production because they were using another company's trademark. 103 The Hubei company stated that it had been unaware that it was using another's trademark and immediately complied with the CCPIT's request. 104 Union Carbide, the owner of the mark, pressed charges against the Hong Kong businessman, but not against the Hubei company. 105 CCPIT also refrained from pressing charges against the Hubei company, but the Ministry of Foreign Economic Relations and Trade ("MOFERT") implemented rules requiring the company to check with the Trademark office before processing any more orders, to ensure that the company would not contribute to infringement. 106

In the dispute involving Coca-Cola, a company producing a soda named Kexi-Kele was allegedly violating Coca-Cola's trade-

This issue could only be put to rest by amending the compulsory licensing provisions to incorporate software.

100 L. Gushu, An Introduction to the System of Industrial Property in China, 87-92 (N.D.) [hereinafter Gushu].

101 Id. at 87-88. Though the report of this case does not explicitly state that the trademark was registered in China, the description of the events, as well as the warning the Hubei company received to check with the trademark office before using a trade name indicate that Eveready was a registered trademark in China. Id. at 88.

[The CCPIT] has been designated by the State Council as the agency which will assist (1) foreign individuals and companies in applying for patents in China, and (2) Chinese individuals and organizations in applying for patents abroad. This agency will write and translate patent applications, provide advice on applying for patents as well as provide legal services relating to patent infringement suits and technology transfer.

Beaumont, The New Patent Law of the People's Republic of China, (PRC): Evidence of A Second Chinese "Renaissance"? 27 IDEA 39, 47 (1986).

103 Gushu, supra note 100, at 87.

104 Id. at 87-88.

105 Id. at 88.

106 Id. at 88.

mark by using three of Coca-Cola's characters. 107 Kexi-Kele could have argued that there was really only one character which was the same, since the Cola/Kele part of the name was generic. 108 Nonetheless, the CCPIT administrator convinced the company that even assuming only a one-character difference between the two names, Kexi-Kele had violated Coca-Cola's trademark, which had been registered in the People's Republic of China ("PRC"). 109 CCPIT went to considerable effort to avoid litigation and instead, through the process of conciliation, 110 persuaded Kexi-Kele to change the trademark. 111

In the case involving Disneyland, a Chinese city was planning to build an amusement park and call it "Dongfang Disneyland." Because Disneyland had not registered any of its trademarks in the PRC, legal infringment of the Disneyland trademarks could not be established. The China Patent Agent H.K. Ltd., however, intervened to resolve the dispute in the interest of advancing China's policy of opening up to foreigners, and to prevent violation of the Paris Convention. The agent successfully persuaded the city that it was in China's best interest not to build Dongfang Disneyland.

not to build Dongfang Disneyland.¹¹⁵

The cases¹¹⁶ discussed above demonstrate that although Chinese companies may not always respect the concept of intellectual property rights, their ministries do.¹¹⁷ Chinese officials have indicated a willingness to have the country pay for the ac-

¹⁰⁷ Id. at 89. A character is the Chinese equivalent of a word. Often, two characters or more are combined to make a different word.

¹⁰⁸ Id. at 89-90.

^{*109*} Id. at 89.

^{110 &}quot;[T]he primary goal [of conciliation] proceedings is to forge a consensus between the parties on questions of fault and compensation and, if necessary, to propose an appropriate settlement. Participation in mediation is supposedly voluntary, and since the parties are not bound by the mediator's recommended settlement they are free to pursue their dispute in a local court. Copyright in China, supra note 10, at 25-26. See generally, Robinson & Doumar, "It is better to Enter a Tiger's Mouth Than a Court of Law", or Dispute Resolution Alternatives in U.S.-China Trade, 5 DICK, J. INT'L L. 247, 248-52 (1987).

¹¹¹ Gushu, supra note 100, at 90.

¹¹² Id. at 91.

¹¹³ Id.

¹¹⁴ The Paris Convention requires member states to protect world famous trademarks even if the marks are not registered. Paris Convention for the Protection of Industrial Property of March 20, 1883, Art. 6 bis (1), 828 U.N.T.S. 305, 325.

¹¹⁵ Gushu, supra note 100, at 91.

¹¹⁶ The book from which these cases are taken is a Chinese government publication; consequently, the case studies may be biased in favor of demonstrating the Patent and Trademark Office's efficiency in handling such situations.

¹¹⁷ Specific information on contract disputes involving software is unavailable. However, one source states that friendly negotiations have been successful in resolving such disputes, "particularly when the Chinese party needs the software in question." Letter from Fred M. Greguras, a partner in the Palo Alto office of Fenwick, Davis & West, to the author (Jan. 19, 1988).

quisition of certain intellectual properties. This sensitivity to the intellectual property rights of Western sellers¹¹⁸ indicates China's increasing willingness, despite its status as a developing country, to recognize the rights of foreign trademarks and to pay for the technologies. This skillfull balance between the goals of China and those of Western sellers in the trademark and patent context may foreshadow China's approach to the legal protection of software.

B. Sui Generis Software Protection

Both Japan¹¹⁹ and China, as well as WIPO, have been strong proponents of developing a hybrid *sui generis* protection for software.¹²⁰ China's Zheng Chengsi, an influential scholar in the fields of software protection and intellectual property, recommends a *sui generis* protection based upon a patent-copyright combination. ¹²¹ Under Zheng's model, neither patent protection nor copyright protection would predominate. This hybrid form of protection would operate similarly to the United States Semiconductor Chip Protection Act of 1984.¹²² Just as the Chip Act incorporates copyright concepts but functions independently of the Copyright Act,¹²³ Zheng Chengsi's proposed protection would incorporate Chinese patent and copyright theories, but would function as a law separate from both the patent and copyright laws.

In debating whether sui generis legislation is the most effective solution to software protection, points of contention often revolve around whether sui generis is, in fact, more restrictive or more flexible than copyright. Either characterization depends on how software programs are classified. This classification will in turn determine whether software is protected under one of the international copyright conventions.

123 Id. at § 912.

Advocates of sui generis argue that since computer programs may simultaneously fall under more than one category of intellectual property, they should be protected by this type of hybrid protection.124 This argument stresses the fact that certain components of software programs are intangible, like the magnetic encoding devices which store the information on the disk. 125 These components fall outside the scope of copyright because the copyright laws specifically require that the expression be fixed in a tangible form. 126 This argument can be refuted by the fact that phonograph records and cassette tapes, which are copyrightable, are also intangible, and require the use of a machine to translate the expression into tangible form. 127 A second argument is that because software programs often perform utilitarian tasks, such as interfacing with other computers, software has a machine-like function. The rebuttal to this argument is that copyright protection should be confined to the program code. which is the "expression" contained in the program. The "process, idea, principle, or algorithm that it (the software) implements" would be ineligible for copyright protection, but might be protected by patent law. 129 This resolution detaches the "writing" (the program code) from the functional part of the program.

Perhaps the most difficult argument that critics of sui generis must confront is that copyright law should be amended to include software. Sui generis proponents attacked this proposal as a "short-sighted solution[s] to [a] complex problem." Amendments to copyright law would arguably be confusing to enforce because it is unclear whether amendments affecting software would also apply to traditional subject matter, such as

19897

¹¹⁸ As the trade names of the Chinese producers begin to have value, the necessity of a deeper understanding of the concept of western intellectual property will probably take on additional significance.

¹¹⁹ Higashima & Ushiku, A New Means of International Protection of Computer Programs Through the Paris Convention — A New Concept of Utility Model, 7 Computer/Law J. 1, 2 (1986).

¹²⁰ See supra note 10.
121 This combination can be illustrated by a Venn diagram: "[i]f we represent patent protection by a yellow circle and copyright protection by a red circle, then the orange region formed when the two circles intersect will be the equitable protection of special industrial copyright... I... believe this theory will be applicable to the protection of computer software." Zheng, The Legal Protection of Computer Software and Its Trend of Development, China Pat. & Trademark, Jan. 1987 at 37.

^{122 17} U.S.C. §§ 901-14 (1982 & Supp. IV 1987).

¹²⁴ See Sui Generis Legislation, supra note 70, at 517.

¹²⁵ Id.

¹²⁶ 17 U.S.C. § 102 (a)(1982 & Supp. IV 1987).

¹²⁷ Sui Generis Legislation, supra note 70, at 518.

¹²⁸ In many cases, software "merely substitute for hardware components." Samuelson, *supra* note 11, at 9.

¹²⁹ M. Keplinger, Copyright and Information Technology, U.S. Copyright Office, Library of Congress, 14 (1980). The flaw in this response is that the process or idea may have economic value and, consequently, deserve legal protection. Although patent would be the most appropriate form of protection, many countries, including the United States and France, have rejected patent for protecting the process or idea implemented by the software. However, as computer technology develops, it may be found that the protection of the process or idea is essential to encourage further developments. Thus, a form of hybrid protection ultimately may be necessary. The equivalent of hybrid protection may be achieved by separately and concurrently granting copyright and patent protection. See supra note 121.

¹³⁰ See supra notes 19-29 and accompanying text.

¹³¹ Pope & Pope, Protection of Proprietary Interests in Computer Software, 30 ALA. L. REV. 527, 553 (1979).

books or films. 132 The amendments are also problematic because the rapid evolution of computer technology would mandate frequent revision of the copyright laws. ¹⁸³ In contrast, sui generis legislation would facilitate the process of constant revision because the legislation would be self-contained and would not affect traditional copyright law. This would eliminate potential conflicts between the demands of new technology and the traditional

areas of protection. 134

Sui generis legislation has been discussed as an alternative in other countries, but has been consistently rejected in favor of extending copyright protection to software. 135 After careful study, sui generis legislation was found to be both superficial and inadequate. 136 The suggested changes merely introduced registration or deposit requirements, or reduced the duration of exclusive

132 See Comment, supra note 70, at 531.

133 Id. In the United States, the incessant stretching and bending of the copyright law raises a potential constitutional issue, identified by Professor Nimmer. He argues that the broad construction of "literary works" necessary to include computer programs in copyright law "stretches the meaning of authors and writings as used in the Copyright Clause of the [U.S.] Constitution beyond the breaking point." Id. at 531, n. 157. (quoting National Commission On New Technological Uses of Copyrighted Works, Fi

NAL REPORT 26 (Nimmer, concurring)):

a: investment and time required;

b. likely future developments;

Id. at 541-43.

136 Id. at 8-9.

rights so that they would be commensurate with the economic life of the software. 137

SOFTWARE PROTECTION IN CHINA

Despite several past failures, the Chinese will probably enact temporary sui generis regulations to protect computer software. 138 Since it is unencumbered by an entrenched copyright system, China's attempts to formulate sui generis regulations may be more sucessful than those of other countries. The Chinese may be able to create an innovative and flexible piece of legislation which focuses on the protection of software, rather than relying on copyright concepts developed for traditional copyrighted works. However, this same lack of precedent means that the protection scheme has no workable foundation to evolve from.

Consequently, the Chinese walk a tightrope between ingenuity and incompetence. They must proceed with caution when proposing sui generis regulations, so as to avoid promulgating a dangerously restrictive and ineffective form of protection. Though sui generis regulations 140 to protect software are plausible, the problems inherent in creating a specific body of law for a rapidly evolving technology could quickly render such a law impotent.¹⁴¹ For instance, developments in the technical components may cause the practical definition of a computer program eventually to exceed the sui generis definition. Within a sui generis system, the program will not be protected unless the law is amended. Within a copyright system, the law may cover the program by defining it broadly as an expression in a tangible form, rather than limiting it to the definition of a computer program. 1421 In the long run, however, the process of amending the sui generis law would at least insulate the copyright law from the problems of adapting to new technologies.

The major problem with China's adoption of sui generis regulations is that the country's concept of property law is traditionally antithetical to the concepts underlying intellectual property law. As a result of this antithesis, the interpretation of a new intellectual property law is bound to conflict with Western expecta-

138 Guo, Some Opinions on Copyright in the People's Republic of China, 1 J. CHINESE LAW 63, 67 (1987) [hereinafter Guo].

¹³⁴ One example of proposed sui geners legislation is the Model Provisions on the Protection of Computer Software, presented by WIPO in 1970. Model Provisions on the Protection of Computer Software, reprinted in id. at App., 541. The Model Provisions, though never enacted, have become an influential source of ideas for the copyright debate. WIPO also proposed a draft treaty for the protection of computer software. Note, The Expansion of the Berne Convention and the Universal Copyright Convention to Protect Computer Software and Future Intellectual Property, 11 Brooklyn J. Int'l L. 283 (1985); WIPO International Union for the Protection of Industrial Property, Draft Treaty for the Protection of Computer Software 3-15, Doc. LPCS/II/3 (1983). However, the international community thought the establishment of a sui generis treaty would be premature and would interfere with the existing national laws. The Model Provisions do not rely on national treatment to protect software. Thus, under the WIPO Treaty, the protections would be consistent between countries. Further, the rights granted to the creators of software are explicit, and proprietors of software are also granted protection, including both economic and moral rights. Comment, Improving the International Framework for the Protection of jComputer Software, 48 U. Pitt. L. Rev. 1151. One of the Model Provision's significant achievements was to articulate the basic reasons for which legal protection of computer software is necessary. The provisions also include definitions for computer programs and the components for computer software, provisions on the rights of the creator of the software and the proprietor of the software, infringement and duration. These include:

protection as an incentive to disclosure;

protection as an incentive for trade;

vulnerability of computer software.

¹³⁵ C. MILLARD, LEGAL PROTECTION OF COMPUTER PROGRAMS AND DATA 8 (1985) (Millard looks at various countries: Canada, the United Kingdom, and the United States; he traces the development and preferences with respect to computer programs. China is not among the countries discussed) [hereinafter MILLARD].

¹³⁷ See Copyright in China, supra, note 10 at 42. The duration of protection should reflect the "economic life" of software, but "given market realities, the relatively long duration afforded to software under copyright would not substantially restrict access after the economic life of software has expired." Id.

¹³⁹ Guo, supra note 138, at 67-68 (discussion of the likely content of future Chinese copyright law). ¹⁴⁰ *Id*.

¹⁴² MILLARD, supra note 135, at 12-13.

tions, regardless of how the law looks on paper. The combination of the Chinese legacy of choosing state interest over individual rights,143 the prediliction toward anti-intellectualism, and the philosophical opposition to private intellectual property will most likely result in a very conservative interpretation of any legal protection enacted, whether it be copyright or sui generis. It is this proclivity towards conservative interpretations which is the decisive factor in choosing to recommend either copyright or sui generis. Since sui generis is already a very specific protection, a narrow interpretation would constrict the range of protection the law confers. Copyright, being much more general in its protection, would not be as limiting after it has been through the interpretive process.

IV. CONCLUSION

Creating the appropriate form of legal protection for computer software is a complex and difficult task. This is even more difficult for China because historically and philosophically the country has been opposed to the concept of intellectual property.

The forms of software protection being contemplated range from drafting a new sui generis law, to maintaining the status quo of licensing contracts, to extending the future copyright law to software. Although it appears that pressure from the U.S. government and software industry groups has persuaded China ultimately to protect software under China's future copyright laws, the sui generis regulations expected to be enacted this year will provide temporary protection until China enacts a permanent law. Consequently, foreigners must prepare themselves for both copyright and sui generis forms of software protection. Despite the potential for confusion between the two forms of protection, there are indications that both will share the similar conceptual foundation of granting individuals financial remuneration for their creations. China's desire to achieve technological modernization and encourage foreign investment has mandated a shift in its approach to copyright and software protection. Although interpretation of the new copyright laws and sui generis regulations is expected to be conservative, this new approach will engender a more generous recognition of intellectual property rights.

Elisa Cirillo

MORE THAN A MOUTHFUL: LIBEL AND THE **RESTAURANT REVIEW**

I. Introduction

Critics serve an essential function in modern society. Most newspapers and many magazines regularly feature movie and restaurant reviews to provide readers with information and recommendations regarding the current films and newest eateries. Due to the relatively higher price of dining out, restaurant reviews often have a greater impact than film reviews. Given the vast number of existing restaurants, the rapidly changing food trends and hot spots, and the large number of restaurant openings each year, both tourists and residents alike look for guidance in choosing where to dine.

Only the well informed will know which type of cuisine is "in" and which restaurants are the most popular. Reviews also provide descriptions of food, quality of service, ambience, clientele and prices. Whether one visits an area for a short time or lives there permanently, restaurant reviews and guides help millions of people, choosing from a veritable sea of restaurants, to attain the ultimate dining experience.

"[F]ood critics, whose words [are] ingested by a gullible public, can mean life or death to a restaurant." The content of a review may significantly affect the patronage of the restaurant evaluated since the public often relies upon critic's recommendations. Naturally, owners are very concerned with the reviews their restaurants receive, and alleged inaccuracy sometimes leads to defamation litigation.2

The restaurant review libel cases have produced a clear and consistent outcome; the defendant food critic has prevailed in each case. Restaurants continue to bring these actions. Perhaps the potentially damaging effect the review could have on the restaurateurs' business and reputation is the driving force in their seeking a judicial remedy, or maybe each simply believes that his particular case is different from the others and, therefore, worthy of recovery.

Regardless of their motives for filing these actions, the res-

¹⁴³ R. Edwards, L. Henkin, & A. Nathan, Human Rights In Contemporary China 21-26 (1986).

¹ Terillo v. New York Newsday, 137 Misc. 2d 65, 67, 519 N.Y.S.2d 914, 917 (Civ. Ct. 1987). For a thorough discussion of *Terillo*, see infra notes 193-204 and accompanying text.

2 See Part IV, infra notes 93-201.