Integrating Privacy Studies into Teacher Education Curricula

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ABSTRACT Privacy studies may be seen by some teacher educators as being 'anti-technology' in their character, with the potential to dim the enthusiasm of future teachers for new technological initiatives. However, privacy is taking on new significance in an age of the Internet and advanced information technologies, as the examples and sources outlined in this article demonstrate. Privacy issues have a strong influence on various pressing international political and economic concerns, and thus add important dimensions to curricula. Some technological developments (such as encryption) also provide hands-on dimensions to privacy topics that are likely to whet the interests of many students. Teacher educators can work to introduce privacy notions to future teachers in ways that will enhance both their information technology studies and their understanding of other curricular areas (including citizenship, business, and social studies). As described in this article, privacy exercises, scenarios, and hands-on laboratory sessions were provided in several teacher education courses in the United States. What teacher educators do in relation to privacy studies will help determine the future character of discourse and the direction of technological development pertaining to privacy.

Introduction

Most societies have a great hunger for information about individual citizens. Public administrators employ this information in various ways in the implementation of policies. Educators use information about individual students to evaluate them and to ascertain the overall effectiveness of their teaching efforts. This information is also deemed essential for businesses – for example, in the quest to identify potential markets. Citizens use this information as well to determine whether their government is serving themselves and their fellow citizens fairly and adequately. In an age when information has great value, privacy has taken on new dimensions of significance. In this article, I describe exercises and strategies for introducing privacy issues in teacher education courses. These classroom

activities highlight the philosophical, historical, and pragmatic aspects of privacy issues, as well as link them to specific curricular areas.

Given the great social significance of information about individuals, a focus on privacy in teacher education curricula may seem misplaced. In its various iterations, privacy as a value has often incorporated aspects of solitude and social withdrawal. However, in recent years privacy is increasingly being associated with self-determination, identity management, and other social concerns on the part of individuals. Individuals who are sufficiently knowledgeable can undertake various privacy measures, such as encrypting their electronic mail or requesting that direct-mail organizations remove their names from mailing lists. However, those who are not knowledgeable are becoming unfortunate 'have-nots' in terms of privacy protection. International factors are adding yet another dimension to privacy issues: various nations are re-examining the basic rights of individuals in the advent of the Internet and advanced surveillance technologies (Castells, 1996).

Privacy issues are in consonance with many of the areas that teacher education students concentrate on, including political and social studies along with technological training in computing. Privacy rights are often supported by legislation and agency mandate (such as certain medical record and credit card protections), so awareness of privacy issues is part of basic education in civics as well. In some households, taking steps to protect one's privacy may soon be as much a part of day-to-day computing activities as backing up one's files, so it is useful in pragmatic terms to become aware of technological developments involving privacy. Even students in the early years of education can benefit from an understanding of basic privacy issues; children as young as 5 years old are being targeted by marketers on the Internet and are probed for information about their family activities (Riegel, 1998). According to many psychologists, young children have a need for privacy and tend to have secrets, which are crucial aspects of their self-development (van Manen & Levering, 1996).

Exploring Privacy as a Value: some conceptual background and classroom exercises

Privacy is a philosophical topic that can be difficult to discuss in the abstract but has strong linkages to practical information management concerns. Data about specific individuals are held in hundreds of databanks, and ideas and images can be disseminated around the globe in seconds. Surveillance satellites capture streams of data through which experts attempt to decipher various civilian as well as military initiatives worldwide. Through geographic information systems, researchers and technicians can construct intricate portraits of international economic activity (Curry, 1997).

What can privacy mean in an era of rapidly changing technological advances? For courses at Baruch College of the City University of New York and the University of Wisconsin I developed an assortment of group discussion topics and exercises (described below) that help to make the complex issues related to privacy clearer for teacher education students (Oravec, 1996). Teacher educators can direct and follow these activities with an exploration of the history and background of privacy concepts. Exploring arguments for and against privacy is important in presenting privacy exercises so as to encourage students to apply critical thinking and argumentation skills to their examination of the issues involved.

The Meaning of 'Privacy'

A revealing beginning exercise for students is to list their own associations with the word 'privacy'. Teachers can subsequently lead discussions about these associations and examine their contexts. The word emerged as a force in political philosophy in the sixteenth century, with considerable linkage to Reformation ideology (Huebert, 1997). Privacy has undergone a number of changes, both as a philosophical concept and in the basic ways that privacy issues are construed by governments. For example, the United Kingdom (UK) is currently going through some critically important changes in its legal treatment of privacy issues with its Human Rights Bill (Dyer, 1997). The Bill confers on citizens a right to privacy that is not currently in place.

Definitions of privacy have changed with social conditions. The phrase 'right to be let alone' was coined in the late 1800s by Warren & Brandeis (1890). This expression of privacy – the right not to be intruded upon by government or by other citizens - played a considerable role in formulations of privacy rights in the past century. Privacy as a cultural object has often been associated with social withdrawal and the choice to live a life apart from community or government intrusion. However, many of the intrusions that we as citizens are facing today are not physical but information-based, from the telemarketer who calls at dinnertime to the doctor who is careless with our medical records. Thus, the meaning of privacy has been increasingly intertwined with social and political aspects of human life. Legal scholar Post (1989) goes so far as to claim that privacy is a 'living reality' in our society only because we participate in a community; privacy makes our intensely social lives bearable. Sociologist Robert Merton (1957) purports that our social existences are only possible because of the buffers that privacy practices provide. In recent years, characterizations of privacy have often involved the concept of information control - the ability of the individual to control the dissemination of information about him or herself (Flaherty, 1993).

What are 'Privacy Invasions'? Some scholars have proposed that privacy itself be defined in terms of the various kinds of privacy invasions we can suffer (Ware, 1982). As another beginning exercise, teacher education students can report on their self-examinations of what they classify as an invasion of privacy and how they respond to such invasions.

In my use of this exercise in the classroom, I have found that students vary widely in their classifications of privacy invasions: for example, some individuals abhor junk mail (or junk email, or 'spam') while others do not consider it as an invasion and even welcome it. Teachers can subsequently conduct 'role-taking' exercises (Kohlberg, 1981) in which students attempt to take the role of other students, and consider why the particular privacy invasion is important to them. After comparisons and contrasts of the students' classifications and discussion of the overall notion of 'privacy invasion', teachers can explore the implications of recent kinds of privacy invasions made possible by the proliferation of computer systems – such as 'identity theft', in which an individual's economic identity is assumed by another person. Concern about identity theft in the United States (US) stimulated the passage of the Identity Theft and Assumption Deterrence Act (Kyl, 1998).

Privacy Rights of Celebrities. Another kind of classroom exercise involves examination of the rights of celebrities to certain levels of privacy. I have found that this exercise stimulates considerable interest, since everyone in the classroom is somewhat familiar with the individuals being discussed. Students can be challenged to do research on a particular case (such as that of Princess Diana), examine whether privacy rights were indeed violated in particular instances, and debate the culpability of the various parties involved. (This topic can be related to journalism or current events curricula, which will be discussed again shortly.)

International discussions about the notion of privacy – as well as some legislative efforts – were indeed generated by the death in 1997 of Princess Diana, which was apparently in part related to her attempts to avoid paparazzi (*National Law Journal*, 1997). In the UK, Princess Diana's death prompted the development of a privacy code designed to curb the activities of over-zealous members of the press (MacLeod, 1997). The need to have some time 'off camera' is apparently a human trait, even for those who understand the nature of publicity and who use it to advance various social purposes. Although few of us are pursued by journalists, all of us have felt some disquiet as we have seen our personal privacy diminished for commercial reasons. Often, we have knowingly, if reluctantly, traded our privacy for certain conveniences, such as credit cards and cash rebate programs.

Privacy Themes in Film and Literature. Discussion of artistic treatments of privacy issues in film and literature can also stimulate debate. Berger &

Pratt (1998) explore how films can be used to introduce complex social and ethical concepts in classrooms. Privacy as a value has been explored in a number of works, from George Orwell's 1984 to recent films such as *The Truman Show* (distributed by Paramount Pictures, 1998). After discussing these artistic characterizations of privacy issues, students can compose their own fleshed-out scenarios of what life would be like for them with increased (or decreased) levels of surveillance.

Exploring Public Opinion Concerning Privacy. As part of their examination of privacy issues, teacher education students can explore trends in public opinion concerning privacy, and relate these trends to the specific privacy initiatives of various governments and industries. They can conduct surveys themselves or analyze the outcomes of other surveys (such as those described in Raab & Bennett, 1998). The character of the public response to privacy concerns has changed somewhat as information technology has permeated society. In the 1950s and 60s, it was more common for discourse about privacy and anonymity to attack the very existence of databanks and the assignment of identification numbers to individuals. For instance, in the US, the public reacted strongly against the notion of a 'National Data Center', which was under serious consideration by the Johnson administration (Westin & Baker, 1972). The Center was intended as a secure, centralized location for the full variety of records about citizens (including health and educational).

However, the widespread outrage that this repository for personal information triggered may seem anachronistic today, as large, tightly networked databanks routinely collect and disseminate collections of records containing information about citizens. Outrage against being assigned a unique identification number has also faded, although citizens still have practical concerns about how those numbers will be used (Stolberg, 1998). In the mid-1990s, I was the Chair of the Privacy Council of the State of Wisconsin (the US's first state-level council dealing with information privacy) and dealt with many citizens who had practical personal concerns about privacy, especially about the use of their 'social security' numbers and other identification signifiers. Public opinion measures still show that citizens are concerned about privacy, but also see the usefulness of many forms of personal information collection (Smith & Milberg, 1996).

Technology and Privacy Linkages. A question that stimulates discussion on the social issues of technology pertains to the difference computer technology has made in our overall levels of privacy. As an exercise, students can debate whether computing has had a strong or minor impact on our levels of privacy. They can contrast the privacy of residents of a small town in the early 1900s, for instance, with those of individuals whose records are kept in computer databanks. Most major institutions had plenty of experience of record keeping before computers came on the scene, with

censuses being conducted even in ancient times. Westin & Baker (1972) assert that record keeping is one of humanity's oldest activities, and note that 'widespread reliance on formal record keeping about individuals had already become a hallmark of American society before computers began to enter organizational life' (p. 4). However, computing has given organizations new record-handling capabilities, including the ability to construct detailed profiles of individuals that are subsequently used in decision making about credit, employment, and health-related matters (Flaherty, 1993). Computer technology has also made sophisticated technologies such as 'smart card' systems possible, which allow for the storage of massive amounts of data in a vehicle that is extremely portable – a smart card can fit in a wallet (Kutler, 1996).

Examining Arguments Against Privacy

Along with learning about privacy, teacher education students can be introduced to the arguments against privacy: those that contend that privacy is unnecessary or anachronistic in an 'information age'. Some scholars and social critics question whether the price of privacy is too high (Nock, 1998; Etzioni, 1999). They assert that the social costs of providing means for information control by individuals make privacy a luxury that societies cannot afford, particularly those that are facing economic problems. One of the most consequential backlashes against privacy is from those who maintain that efficiency in data handling is more important than maintaining privacy protections for individuals (Posch, 1995). For organizations that are already suffering resource strains from their attempts to handle the Year 2000 (Y2K) problem, the additional drain that privacy initiatives involve may be overwhelming. However, the Y2K problem is indeed triggering the re-engineering of many information systems – which allows for the opportunity to build privacy protections and security measures into place, rather than adding them on as an afterthought (Oravec, 1998/1999).

With the focus on information as an economic commodity and on technology as a means of control, some scholars and researchers have predicted that privacy as a value is dying out (O'Brien, 1997). Others claim that privacy is being overshadowed by other substantial values such as freedom of information as we move toward a 'transparent society' (Brin, 1998). Brin's defense of the free flow of information is based on the assumption that if all the recorded information about everyone is exposed, individuals on the whole would benefit rather than suffer. Controversies about whether an emphasis on privacy would diminish other rights, such as freedom of the press, have also been common in public debate on privacy. Journalists have often protested that privacy considerations can keep them from doing their jobs, thus preventing newspapers from reflecting societal conditions. They often posit that if governments do not release information

about citizens to the press (on the grounds that it can violate those citizens' privacy rights), the public's 'need to know' may suffer (Branscomb, 1994). Rupert Murdoch of News Corporation asserts that calls for privacy laws are 'for the protection of people who are already privileged' (Dyer, 1997). Teacher education curricula in journalism and current events can be enhanced by discussion of these issues.

Other arguments against privacy abound. Some forms of medical privacy may keep research data from being used in beneficial ways by doctors and scientists, although means can often be put into place to protect individual privacy in this arena (Riis & Nylenna, 1991; Crabbe & Donmall, 1996). A number of psychologists have even labeled privacy as dysfunctional, blocking individuals from needed intimacy (Hosman & Siltanen, 1995). 'Healthy' human beings supposedly choose to reveal their inner secrets and expose their opinions and ideas to others without a need to stifle the flow of information. If teachers draw from various sources (such as those just described), their students can be given the opportunity to weigh the various arguments for and against privacy, as well as express their own opinions on these weighty matters.

Part of the backlash against privacy includes the rationale that information is valuable largely for its economic significance, and that personal or emotional values relating to information should take secondary positions. Some nations and even individual states benefit monetarily from the capture and sale of information about their citizens, in effect, becoming 'information brokers', with the citizen as 'data subject' (Daniel, 1997).

Defining and securing property interests in the information that pertains to us may make it easier to work with organizations to correct and control the dissemination of personal information. The notion that we as individuals 'own' our personal information – that it belongs to us the way other possessions do – has been expanded by some sociologists and legal scholars. Rule & Hunter (1996) and Hagel & Rayport (1997) claim that many citizens will soon demand to have such property rights, since they are becoming more aware of how commercial firms are profiting from their information. If we own our personal information (such as our genetic markers and credit histories) we may be better able to control how and when it is disseminated and used for commercial purposes. In teacher education classrooms, students can explore scenarios in which individuals are given some level of property rights to their personal information (for example, being paid when their identifying information is sold in a commercial database).

Whether or not students decide that privacy is important as a value, it is hard to deny the substantial role that privacy concerns have had in the implementation and evaluation of information systems. Many professional

organizations of computer specialists have championed privacy, including the Association for Computing Machinery (ACM), which contends that members should 'always consider the principle of privacy' (ACM, 1980).

Integrating Specific Privacy Issues and Special Topics into Curricula

After a general introduction to privacy and some beginning exercises, teacher education students can tackle more specific privacy concerns as they emerge. In my teacher education courses, I have found that topics such as those outlined below are especially involving for students:

Genetic Testing and Privacy

New issues related to privacy are constantly emerging, such as those of genetic testing and the use of biological traces to identify individuals. Information collection is going beyond the recording of our transactions and activities; with the growing capability to obtain information about individuals in the form of genetic traces, brain activity patterns, and iris scans few parts of our existences are beyond the reach of computing technology (Wilson & Schrader, 1998; Wu, 1998). We ourselves carry 'information' in our genes that can be used to predict how long we can expect to live and whether we have an impairment that affects our workplace activities. Hurd describes the breadth of the impact of genetic testing in the following way: 'The tests can disclose not only a person's genetic makeup but also his or her medical history, use of drugs, diet, the presence of sexually-transmitted diseases, and predisposition to disease' (Hurd, 1990, p. 251).

Exploration of genetic testing and related privacy issues can enhance science and technology studies as well as civics and public policy curricula. Efforts to clarify our moral rights in terms of genetic privacy are expanding, although they have reached a number of obstacles. In the US, Governor Christine Todd Whitman of New Jersey vetoed the state's Genetic Privacy Bill, which would have granted property rights to individuals for their genetic information (Quade, 1993). However, several important research groups are taking the lead in mapping the privacy issues involved in the genetic testing of humans, including the British Human Genetics Advisory Commission (*The Times Higher Education Supplement*, 1997). Students can debate the appropriateness of the Genetic Privacy Bill and the value of the Advisory Commission findings.

Educational Records and Privacy

Students themselves face an assortment of new privacy-related issues in their own roles in the educational system, and scenarios that directly involve them can be especially useful in stimulating classroom discussion (Anderson, 1996). For example, plans by the Universities and Colleges Admissions Service to store the curricula vitae of students on electronic databases recently triggered widespread debate and concern (Swain, 1998). Students can debate the value of the benefits of centralized storage of records versus the privacy concerns of the individuals involved.

Surveillance Issues

Technological observation of citizens is increasing; most students will be aware of electronic monitoring in their everyday routines. Surveillance cameras watch them in shopping malls, records of their various purchases and uses of credit are compiled and sold, and their Internet surfing expeditions are tracked (Lasica, 1998). Many businesses and even schools monitor employees, often covertly (Gannon-Leary, 1997; Oravec, 1999). Reportedly, the UK has used surveillance cameras for social control more than any other Western nation (Coleman & Sim. 1998). When surveillance of activities is coupled with profiling, intricate portraits of individuals' lives can be developed: a number of organizations (including marketers and financial organizations) analyze personal information about individuals and compile it into refined, detailed 'profiles' that are designed to reflect important trends and dimensions of their lives. Surveillance issues can be integrated into teacher education curricula in business to underscore the trade-offs businesses often make between individuals' privacy and corporate security.

Students can be assigned to monitor various newsgroups and web sites for information about emerging privacy issues. For example, the Electronic Privacy Information Center (EPIC, at www.epic.org), Cyber-Rights and Cyber-Liberties (UK) (at www.cyber-rights.org), Electronic Frontier Foundation (EFF, at www.eff.org), and the Computer Professionals for Social Responsibility (CPSR, at www.cpsr.org) sponsor newsgroups and issue 'privacy alerts' available via email.

Some International Political and Economic Dimensions of Privacy

Classroom examinations of privacy can be usefully integrated into teacher education curricula in ways that amplify discussions on current international issues. Students can research the privacy initiatives of individual countries, and teachers can provide background and help students in classroom discussions to synthesize larger trends. Efforts to be a full participant in the 'global information economy' are influencing political and social conditions in many nations, and privacy and surveillance issues are intertwined in these efforts. Even some impoverished nations are investing in high technology, often in hopes of bootstrapping their economies (Gordon & Wolpe, 1998; Wheeler, 1998). However, many of the computing technology applications that governments and large organizations have put into place are designed to monitor and control individuals as well as improve economic conditions (Smith, 1994).

Privacy considerations are playing an increasingly influential role in international economic and political deliberations; Myers (1997) provides a useful overview of these impacts. The European Union's Directive on Privacy Protection has stimulated governments and corporations worldwide to reconsider their stances on privacy (Rodger, 1998). Among other stipulations, the Directive requires firms that transport data across national borders to have particular privacy procedures in place. The efforts of the International Standards Organization to develop an international standard for privacy protection (*Northern Ontario Business*, 1998) will place privacy issues even more prominently on the international stage. As yet, few nations have effective legislative or constitutional safeguards for privacy. Many have protections that are of a 'patchwork' quality; the right of privacy is inferred from combinations of various legislative and constitutional shields. For example, the US Constitution does not directly mention a right to privacy. Although legal supports for privacy rights have rarely been powerful, a number of anthropologists contend that most societies seem to afford at least some measure of privacy protections, often through informal social mores (Moore, 1984).

Decreasing the Gap between Privacy 'Haves' and 'Have-Nots'

Computing technology is affording technologically capable individuals ways to counter some forms of surveillance and data collection; they can use encryption, home security devices, and the various means to send anonymous messages (such as anonymous remailers). Individuals are beginning to gain advanced capabilities for ensuring their own privacy as well as managing (and exploring) their own identities. However, only a small portion of the population – with technical backgrounds – will be able to work to protect themselves and to participate in the increasingly complex discussions of how privacy is to be protected in an information age.

Teacher education classrooms in several curricular areas can readily integrate hands-on practice in various forms of technological and institutional privacy protections. In business, technology, and civics classrooms, students can obtain and examine their own credit reports and

other relevant documents pertaining to them. Students can also use the Internet to obtain information about a particular person in order to explore how much information is freely available about each of us. Students can also get in touch with government agencies to ascertain how much and what kinds of information are collected about citizens, and contact their representatives to express their opinions about such information collection. Technically advanced students can also experiment with various privacy protection technologies (such as encryption methods for electronic mail correspondence).

Some legislative efforts in various nations have also assisted individuals in dealing with the organizations that collect and disseminate information about them. Individuals have some limited rights to correct or at least amend driver and credit records in some countries (Smith, 1994). However, many of the major new privacy protections today are not put in place automatically, and individuals must be proactive in protecting themselves and their households. For example, individuals with enough time and institutional sophistication have some limited means of 'opting out' of some of the databases of direct marketing organizations; they can also help to protect themselves against the encroachments of telemarketers (Romano, 1998).

Teacher educators can take advantage of a number of useful sources of information about privacy rights in developing their curricular approaches toward privacy. Academic and general audience books such as The Right to Privacy (Alderman & Kennedy, 1998) and Computers, Surveillance, and Privacy (Lyon & Zureik, 1996) examine the legal and social underpinnings of the notion of privacy. Practical books including Personal Information (Wacks, 1993), The Computer Privacy Handbook (Bacard, 1995) and The Privacy Rights Handbook: how to take control of your personal information (Givens, 1997) assist those who have at least a moderate level of technological capability to increase their privacy protection. Students can also explore ways that technology has increased opportunities for anonymity; the Internet gives individuals an opportunity to participate in discussions and other interactions with a certain level of anonymity (if certain precautions are taken), as described in *Protecting Yourself Online* (Gelman, 1998). Today, individuals partake in chatrooms and newsgroups with few clues as to their identities, and many have taken this opportunity to explore new ideas and experiment with a different social status or gender affiliation (Turkle, 1995; Oravec, 1996).

Teacher educators can thus help to decrease the growing gap between privacy 'haves' and 'have-nots,' one that is being considerably widened by differences in the ability to wield the various technologies that can protect one's personal privacy. Since access to the means to control information about oneself is essential for protecting one's social and economic positions, many advanced technological developments are diminishing even further the

prospects for those who are not informed about privacy options and equipped to put them into place. By engaging student teachers in the study of privacy issues, teacher educators can expand the ranks of those who are well informed about privacy and who have an understanding of the technologies involved.

Some Conclusions and Reflections

Privacy is an enduring cultural value that has a large number of implications for the teaching of information technology along with other academic subjects (including business and social studies). Although it has changed in character through the centuries and across nations, the notion of privacy has had a lasting influence on the character of our personal and political lives. Teacher education classrooms can provide future teachers some useful background in privacy studies whether or not they are specializing in information technology, empowering them to introduce the various sides of issues to their future students with increased confidence and ability. Classroom time is limited and it is difficult to integrate new topics into curricula, but privacy topics can provide needed linkages between the realms of technology and societal concerns (in the contexts of business, citizenship studies, and social studies curricula, for instance).

Discussions of the monetary value of personal information can provide context for privacy debates: why indeed is our personal information so valuable to business and governmental concerns? Computer networks are making information about citizens and minute aspects of their behavior more widely available; in doing so, they are also exposing details that have considerable value to marketers and direct mail organizations. Political tensions are also affecting the character of current discourse on privacy; for example, the onslaught of computer technology in other nations, as well as the flow of data about citizens, is often strongly associated with 'Americanization' (Curry, 1996). Some nations are working to establish data protection safeguards for information about their citizens, with the European Union leading some current initiatives.

In the advent of the Internet, more information is being collected about our activities than ever before, and many individuals are demanding (and often receiving) some means for controlling what information is being collected about them. In reflecting on the implications of the Internet for privacy, Chief Executive Officer Steve Case of America Online (1998), contends that 'privacy is one of those issues that transcends the regulatory and legislative challenges and even rises above the public policy discussion' (p. 433). However, he also notes that the means to create experiences that are highly personalized are attracting many people to the Internet, and constructing those personalized experiences requires the collection of

information about individuals. In a growing number of Internet applications, users can determine what information is collected (if any) when they visit a web site (Cahill, 1997; Dalton, 1998; Lasica, 1998), thus eliminating surreptitious information collection.

Despite all of the important benefits of the teaching of 'privacy studies', it is not yet part of most academic curricula (Johnston, 1998). There are few direct efforts by governments and business to expand the privacy consciousness of employees and consumers. As decisions about privacy and anonymity increasingly become technical ones, some informed and technically sophisticated individuals may indeed be able to secure more control over their communications and personal information, but most of us will not. The teachers of the future will play a great role in determining whether average citizens acquire some consciousness of privacy issues and awareness of the technological and political changes relating to privacy. If teacher educators become aware of the methods used in introducing privacy issues in their classrooms, they can present these issues in a stimulating and involving manner while avoiding the 'indoctrination' of students in privacy values. An approach toward privacy in which arguments for privacy are balanced with arguments against it (as outlined in this article) can allow students to investigate these issues and come to conclusions for themselves.

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