A THEORETICAL ANALYSIS OF THE RULE OF ADVERSE POSSESSION

by

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Harvard-Radcliffe College (1983)

SUBMITTED TO THE DEPARTMENT OF ECONOMICS
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY IN ECONOMICS

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
September, 1990

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ABSTRACT

The rule of adverse possession (AP) transfers presumed or actual ownership of real estate from known prior owner to current possessor after a fixed statutory period. Prolonged possession may constitute: a justification for **transferring ownership** to possessor; a fact **proving ownership** of possessor; or a reason for **suspending right to enforce ownership** claim against possessor. The paper mainly examines AP as a proof of possessor's ownership.

In the legal literature, AP is described both as a **statute of limitations** (SOL) on owner's enforcement of his rights, and as a punishment for owner's **negligence** in defending his rights within the statutory period. These approaches to AP are examined in the light of the efficiency interpretation of "statutes of limitations" and "negligence" in the Law and Economics literature.

AP also fits the definition of a **Transfer Rule** (TR) - a rule describing how to resolve cases of disputed ownership - and is described in the context of the TR literature. A simple two-period model is developed showing optimal AP threshold as a function of the characteristics of non-possessory evidence.

Since a dishonest prior owner has an incentive to delay suit until owner may have lost evidence, an early suit is a **signal** that plaintiff is true owner. So AP may be viewed as a signalling game similar to the Spence education model. A simple model in continuous time is developed.

The negligence approach in law and the signalling approach in economics involve a strategic element: prior owner must act early to prove his title. The SOL approach in law and the TR approach in economics can justify AP on the basis of the time characteristics of proofs of ownership alone - possessory evidence being more durable than non-possessory evidence.

The transfer and enforcement justifications for AP are studied.

The efficiency significance of the requirement that possessor's use be **full, normal and continous** is studied.

Thesis supervisors: Dr. Franklin M. Fisher and Dr. Oliver Hart

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BIOGRAPHICAL NOTE

The author studied at Harvard-Radcliffe College and received a B.A. (cum laude) in Applied Mathematics specializing in Economics in 1983.

Subsequently he spent a year as a Research Assistant at the Council of Economic Advisers in Washington D.C., under Chairman Martin Feldstein, aiding in the preparation of the 1984 **Economic Report of the President.** At the conclusion of his tenure he began graduate work at MIT.

Both as an undergraduate at Harvard-Radcliffe and as a graduate student at MIT, he worked extensively as a research assistant at the National Bureau of Economic Research (NBER) in Cambridge, MA, mainly as the programmer of the Auerbach-Kotlikoff life-cycle dynamic fiscal policy model. He also aided Professor Ariel Pakes in the application of the symbolic mathematics program MACSYMA to the solution of a complicated recursion problem arising in an econometric model optimal patent lifetime.

The author worked extensively on the mathematical and programming aspects of solving a dynamic inflation model of Stanley Fischer, in summer 1985 at the Bank of Israel (under the supervision of Rafi Melnick) and in summer 1986 at the World Bank in Washington, D.C. (under the supervision of Sweder von Wijnbergen).

In 1985 the author was attached to the Athena micro-computer project at MIT, under the supervision of Professor Henry Farber, and wrote CHRONIC - a microcomputer time-series analysis program with user interface.

The author is currently a student of Jewish Law at the Mercaz Ha-Rav Yeshiva in Jerusalem, Israel.

ACKNOWLEDGMENTS

This paper would not have been possible without the patient exertions of Yoni Rabinowitz to explain to me the intricacies of Jewish property law. Any defects in my understanding are despite and certainly not owing to his explanations. My understanding benefitted greatly also from discussions with David Linzer.

William Levin provided indispensable help in locating sources in Anglo-American law.

My advisors, Franklin M. Fisher and Oliver Hart, provided much more than routine advice and the paper owes much of its current form to their innumerable thoughtful comments.

PREFACE

The original idea for this paper grew out of a study of the early Medieval Jewish Law commentaries on the section of the Talmud outlining the Jewish Law version of Adverse Possession. I was amazed at the profundity of the analysis and in particular the exacting recognition and description of the strategic and equilibrium aspects of AP - that is the "game" aspects. This amazement was particularly salient in the study of the commentary of Nachmanides and those of his students. It occurred to me to construct a simple game-theoretical model of AP based on the analysis in these commentaries.

An early, rather primitive version was presented to Frank Fisher, who encouraged me in the development of the model and expressed his feeling that an appropriate elaboration would be a suitable thesis topic. Oliver Hart also agreed to act as thesis advisor.

The first draft made only passing reference to the corresponding rule in English and American law, and both Professor Fisher and Professor Hart strongly urged me to expand this section so that the paper would be in effect

comparative. The model at that stage was also rather unwieldy and complicated mathematically, and Professor Hart in particular stressed the importance of having a simple model. This suggestion led to the two models presented here, which are both considerably simpler and also explain far more than the original recursive, continuous-time model.

The time and effort that I have invested in trying to organize and present the game-theoretical aspects of AP have greatly increased the original amazement I felt at the profundity of the early Jewish commentaries. Certain passages which had been difficult for me for years to understand satisfactorily took on new significance only as the model was elaborated into its very final stages. I am sure that other passages will reveal their meaning to me only with additional exertions in their elucidation. Few indeed merit to adequately plumb the depths of the wellsprings of these inspired scholars.

While I have tried to remain brief, the paper contains a fair amount of law. My experience in the Law and Economics literature has convinced me that to skimp on substantive law is a great mistake. Most authors in the field are either

lawyers or economists, and exhibit some weakness out of their field. (Posner, a great lawyer and a great economist, is the great exception.) Of these, the works weak in economics, which explain something poorly, are often far preferable to the works weak in law, which explain nothing very precisely.

These latter remind me of the archer in a famous story. The great Maggid (itinerant preacher) of Dubnow was once asked how he managed to illustrate every point with a precisely apt parable. He answered - of course - with a parable:

A visitor to a forest saw a number of trees painted with targets; in each target an arrow rested in a perfect bull's-eye. When he found the archer, he asked him what was the secret of his amazing marksmanship. The latter explained his prowess very simply: First I shoot the arrows; then I paint the targets.

NOTE ON LEGAL CONTENT

The paper is written from the point of view of an economist. I have no formal training in either Jewish or Anglo-American jurisprudence, and the legalistic side of the paper represents only my best efforts to accurately represent the law, its history and its many subtleties. These efforts have reinforced my respect for the specialists in these areas, whose indulgence is requested regarding any misrepresentations. Comments and corrections will be most gratefully appreciated.

NOTE ON TERMINOLOGY

This paper, while written for economists, employs many terms and concepts alien to economics. Legal and foreign terms are explained briefly in the text the first time they are mentioned, and are defined in a glossary (Appendix A).

A knowledge of the structure of Jewish law, while not indispensable to following the paper, will contribute greatly to an exact understanding of the terms and concepts employed. Appendix B provides a brief exposition.

A knowledge of the structure of English law is of somewhat greater importance. This is because the paper traces the history of statutes over eras which almost represent distinct legal systems; because the analysis of AP in AAL concentrates more on the question of definition of rights, which demands more understanding of the underlying system; and because the English legal system with its procedural emphasis is more difficult for an economist to grasp. Therefore the aspects of English relevant for the purposes of the paper have been included in the main body of the paper, section III.

There is no standard citation format for works of Jewish law (as I have established after consultation with leading experts). The format I have adopted is based on the guidelines given for "classical works" in the style manuals. In particular:

The names of Jewish law scholars used in the text are those current in Jewish sources, which are usually acronyms. Example: RaShBa, for Rav Shlomo Ben Avraham (Adret). If there is another name more familiar to English-speaking readers, it is employed instead. Example: Maimonides, not Rambam. Where customary I employ the name of the work and not that of the

author. Example: **K'tsot ha-Choshen**, seldom referred to in the name of the author, Rabbi Aryeh Lieb ha-Kohen Heller.

By contrast, the List of Sources uses the names, dates, and titles exactly as they appear in the Library of Congress catalog, in order to provide standardization and to facilitate finding works in libraries. Where the name used in the text is different, it is given in brackets in the List of Sources entry.

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I. INTRODUCTION

All mature legal systems have rules of adverse possession (AP), which establish conditions under which presumed ownership of real estate passes from a known previous owner to the current **possessor** - the one exercising physical sovereignty over the land - after a statutory period or threshold. The rule requires that the possessor's use of the land appear inconsistent with the old owner's claim - that is, his possession must be **adverse.** The presumption of ownership may be rebuttable, as in Jewish law (JL), or final, as in Anglo-American law (AAL).

A law which nullifies such a basic right as that to sue for recovery of valuable property, and which is nonetheless so universal, must certainly have important efficiency benefits. Indeed, adverse possession thresholds influence efficiency in several ways.

DIMENSIONS OF ECONOMIC EFFICIENCY IN LAW

Legal institutions influence economic efficiency on several levels.

1. First of all they must **define** rights which, properly enforced, may increase society's wealth. For instance, the institution of private property in cropland significantly increases the incentive for agricultural activity; whereas free access to public goods maximizes their enjoyment.

2. Rights once defined must be **allocated** efficaciously, by tending to vest ownership in the most efficient user. Very often a market is the most efficient allocation system, since a more-efficient potential user can compensate current owner to the extent of his added productivity.

3. A specific allocation of rights is costly to **administer**, since it may occur that several parties claim that title has been allocated to them. One aspect of adminstration is to decide what evidence will be acceptable as proof of ownership. All states invest in elaborate and expensive systems of automobile ownership registration to be able to uniquely determine ownership of a particular vehicle; few compel registration of real estate, despite the far higher value of the average transaction, and accept a variety of proofs that a voluntary transfer has occurred.[1]

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1 Part of the administration cost may be the cost of locating the claimants. Once a stolen car is located, it is an easy matter to prove who is owner. But it is prohibitively expensive to locate the "defendant" who is possessing the car adversely.

4. Finally, a specific determinate allocation is costly to **enforce.** There is no extradition for minor crimes, even when there is no doubt of the identity and location of the party subject to judgment, because extradition is a particularly expensive law enforcement measure.

The first and the fourth levels, definition and enforcement, are in general difficult to distinguish, because of the well-known principle **ibi remedio ibi jus**[2], i.e., where there is no remedy there is no right. The case of extradition is definitely a case of enforcement because only some remedies are eliminated because of their expense, but the illegal act is certainly sanctionable. We will adopt this criterion: where possession extinguishes all remedies a right is defined; where specific remedies are suspended, enforcement is limited.

The first and second levels also seem similar: in the case of involuntary transfers, is the right limited or transferred? For instance, does eminent domain limit the scope of private property or merely transfer it under certain circumstances? We adopt the following rule: private property

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2 Cf. William F. Walsh, "Title by Adverse Possession - I," **New York University Law Quarterly Review** 16 (1938): 536: "The law does not recognize a title which it will not protect."

is defined by its scope, not its duration. If some rights remain in the original owner, then there is a limitation in the scope of property rights; if all rights are transferred to some other party, then title is transferred.[3]

ADVERSE POSSESSION AND THE DIMENSIONS OF EFFICIENCY

Let us examine AP's impact on each of these four levels, remaining alert to the proper classification of borderline cases.

1. Part of the definition of private property is the right to exclude others.[4] So there is no doubt that a landowner is permitted to exclude the public from his private path. However, if the public uses his path adversely for a period of years, he loses his right, in JL, to modify his property in a way which inhibits their thoroughfare[5]. This is not a case of "escheat" where the land becomes the property of the community; it is merely a change in the scope of the owner's rights in his property.

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3 It follows that eminent domain is a transfer.
4 Otherwise it is not "private".
5 Babylonian Talmud, Tractate Bava Batra: 12a.

2. Despite the efficiency advantages of relying on voluntary market transfers, involuntary ones may sometimes be beneficial. If an owner is neither selling nor efficiently exploiting his property over a prolonged period, it could be in the interest of society to transfer it to someone else. AP tends to transfer property from non-exploiters - non-possessing former owners - to exploiters - adverse possessors, who must by law make optimal use of the land. It seems that the ancient Roman adverse possession statute had this very objective.[6] "Homesteading", whereby the government grants land to anyone who stakes a legitimate undeveloped claim and works it productively for a certain period, is quite similar, except that the possession of the homesteader is not technically adverse, since it is with the consent of the owner.[7]

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6 According to **Encyclopedia Judaica**, 1971 ed. S.v. "Hazaka," by Isaac Levitats.

7 Namely, the state. But one definition of "adverse" is "with intention to acquire title", and according to this definition homesteading is indeed a type of adverse possession.

This is a peculiar borderline case, since we are asserting a limitation in the **state's** property right - it forfeits this right when a homesteader occupies. But the state desires this transfer, and furthermore property rights are themselves (in AAL) defined by the state. The same uncertainty exists by "escheat" - if a freeholder dies without heirs his property reverts to the Monarch. Does the property right pass to the state, or does the state define ownership as a relationship that lasts only while the owner holds, transfers, or bequeathes?

Overall, modern legal systems eschew such transfers, perhaps due to an understanding that the cost of undermining the institution private property is more than any gain to be achieved through a few ostensibly efficient re-allocations.[8] However, the idea of "efficient involuntary transfers" continues to provide some of the rationale for AP in AAL.[9]

3. Once there is an owner, we must worry that he retains control of the property in the event of a challenge. So we need specific criteria for deciding between competing ownership claims. These criteria are termed by Jackson "transfer rules"[10]. Adverse possession in JL is a transfer rule stating that for a fixed period of time the possessor must prove that he acquired valid title from the prior owner,

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8 Werner Z. Hirsch **Law and Economics**, 2d ed. (Boston: Academic Press, 1988): 30,36 considers transfer from non-exploiter to exploiter the main economic reason for AP. Although his analysis seems intended to apply to the modern statute, this would be inexplicable, since the overwhelming majority of modern AP cases are boundary misunderstandings where the owner failed to exploit only because he did not know that the land was his. See Richard A. Posner, **Economic Analysis of Law**, 3d ed. (Boston and Toronto: Little, Brown and Co., 1986): 71.

9 As detailed in Thomas W. Merrill, "Property Rules, Liability Rules, and Adverse Possession," **Northwestern University Law Review** 79 (1985): 1130,1131, and mentioned by Posner (3d ed.), 70 citing Oliver Wendell Holmes' "Path of the Law", 10 **Harvard Law Review** 457,477 (1897).

10 Thomas H. Jackson, "Transfer Rules and the Resolution of Competing Ownership Claims," Stanford University Law and Economics Working Paper (September 1986): 1. It is not clear from the context if this is his own coinage.

and thenceforth possession carries a presumption (non-rebuttable in AAL) of ownership.

Suppose non-possessory evidence, such as written title, is less expensive in the short run to correlate with ownership than possession - that is, it is cheaper to write a deed than to forgo the ability to lease and to recover from interlopers. But suppose that such evidence is not durable - contracts can be lost. Then the least expensive way of distinguishing between true owner and dishonest claimant is a transfer rule relying on non-possessory evidence for a fixed period and then deciding on the basis of possession, as in AP.

4. Where the true owner is known, it may be that the cost of enforcing his claim to the property rises with the time of tortious possession. Then it may be efficient to deny him the right of enforcement after a period of time.

One reason for the effect of length of possession on cost of dispossession is the likelihood of violent incidents when removing someone from his accustomed abode. This reason is mentioned in several papers.[11] This is an enforcement and not a rights or transfer justification according to our

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11 See e.g. Merrill, 1131; , Charles C. Callahan, **Adverse Possession** (Columbus; Ohio State University Press, 1961): 36.

criterion, since if the owner displaces the possessor himself then his ownership is assured, so that the wrong has a remedy.

Another frequently-mentioned reason is that a resident, if undisturbed, develops "reliance interests" in the property; it is extremely costly from his subjective point of view to remove him.[12] Here also the owner's right is not extinguished, since if the possessor leaves voluntarily the owner is unquestionably the sole title holder.

While an AP threshold in general acts on all four levels of legal efficiency, particular provisions may promote some more than others, and even at the expense of others. This is illustrated most obviously by the length of the threshold. It may be that the optimal threshold for distinguishing owner from squatter is very long; but such a long threshold may imply prohibitive enforcement costs because of the reliance interests which take root in such a period.

The same conflict exists with respect to other requirements of the statute. In JL, the adverse possessor must

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12 Merrill 1131. A problem with this reason is that these reliance interests are partially endogenous, since they base themselves to some extent on the fact that the law protects them. Cf. Merrill 1132: "Indeed, most modern property theorists, following Bentham, assume that property rights are the creature of law, not of unilateral expectations inconsistent with the law."

make a **bona fide** claim of having acquired title voluntarily from the known owner. This inexpensive provision obviously increases the efficiency of "administration", since we don't grant title to someone who admits he never acquired it. But such claim clearly has no bearing on reliance interests.[13]

FOCUS AND STRUCTURE OF THE PAPER

The main interest of this paper is definitely the third level of legal efficiency, the allocation aspect, and this is the subject of section V, "Adverse Possession as an Efficient Means of Resolving Title Disputes". This aspect of AP is discussed from the point of view of its discussion in the legal literature and in the economics literature, and two different mathematical models are developed.

The other three levels are together the subject of section VI, "Other Objectives of AP". The examples given above, as well as other very important impacts of AP on definition, allocation and enforcement of rights, are discussed.

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13 Except to the extent that these are endogenous, as mentioned above.

The main emphasis of the paper is the duration requirement of AP. However, AP places many conditions on the character of possession which can qualify for title; in particular there must be full, normal, and continuous use of the property, both in JL and in AAL. The influence of these requirements on legal efficiency, especially the efficiency of discerning true owner, is the subject of section VII, "Character of Possession Requirements".

Sections II and III outline the historical application and scholarly discussion of AP in JL and AAL respectively. Section IV gives details of the law in both systems in detail, with documentation. While some economic insights have been introduced, these sections are mostly law. The reader is urged not to become discouraged, since these three sections contain the raw material from which the subsequent analysis is constructed. This is not only true in terms of the details of the law but also in terms of the main theories of how and why it works; legal theories presented in sections II and III will be given economic content in later sections.

The JL section is fairly straightforward. There is comparatively little difference of opinion as to the actual details of the law, and no significant variation in the law

itself over time. Several different theories exist as to the exact assumptions of the law and the justification for various provisions, but they all agree on the main thrust of the rule: to maximize the chances of vesting the property in its true owner, as opposed to a dishonest usurper - the third of the four ends just mentioned.

However, the evolution of the AAL statute needs to be studied more carefully. All the mentioned objectives are involved, and their importance fluctuates over the centuries, centuries during which England went from a primitive system of law to its modern system, and from a feudal, agricultural society to a modern commercial economy. The American legal system added twists of its own.

A peculiar difficulty in understanding the evolution of the English statute is the dominant influence of purely procedural, or technical, considerations on the law. Some effort has been made to minimize the mention of these considerations, which are of very little economic interest; but the fact is that they were of overwhelming importance, and the reader's patience is requested.

To summarize briefly, the early forms of the statute were meant to deal with dishonesty, as in the case of JL, but

the law sought a balance between protecting rights of legitimate title holders and between "keeping the peace", which contrasts with the narrower focus of JL. In the modern era, the statute deals almost exclusively with errors, in other words mistakes in surveying and mistaken possession.[14]

The paper is theoretical; examinations of the influence of different parameters on the length of the threshold are quite general, and no estimations are done. A very thoughtful empirical work, the only one I have seen, is Netter et al. "An Economic Analysis of Adverse Possession Statutes".[15]

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14 That is to say, these cases constitute the bulk of litigation. Litigation occurs in the "gray areas" of the law, so this does not prove that the main effect of AP is in border disputes; on the contrary, it could just prove that AP is so effective in its "main" end of settling estate disputes that the cases do not reach the courts. But the fact is that it is very unusual for entire properties to be neglected for periods approaching AP thresholds.

15 Netter, Jeffrey M., Philip L. Hersch and William D. Manson, "An Economic Analysis of Adverse Possession Statutes," **International Review of Law and Economics** 6 (1986): 217-227.

II. THE RULE OF ADVERSE POSSESSION IN JEWISH LAW

A. HISTORY OF AP IN JL

The Jewish law of adverse possession is largely based on discussions in the third chapter of Babylonian Talmud tractate Bava Batra. The conclusions of these discussions, together with further elaborations, are detailed by medieval and modern commentators and codifiers who constitute the **de facto** legislature of Jewish law[1]. The name of the rule is the "rule of three years' possession".[2]

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1 See appendix. Jewish law shares characteristics of common law and statute law type systems of judgment.

2 Or: "the three years' legal presumption". The Hebrew word **hazaka** in the expression translated in the text, **hezkat shalosh shanim**, is a homonym, meaning both "possession" or seisin, and also "legal presumption". Of course both aspects are present, and both explanations of the term are found in the early commentators.

Jacob J. Rabinowitz, translator, **The Code of Maimonides: Book of Civil Laws** (New Haven: Yale University Press, 1949) uses the word "seizin" (an alternative spelling of "seisin") where the text seems unambiguously to refer to "legal presumption." (Laws of Pleading, chapter 11, law 1.) His understanding seems to be that this latter denotation is figurative, in that the presumed owner is in effect judicially seised (transitive) of the object. According to this understanding, the use of the term for a legal presumption even when there is no material referent - such as a **hazaka** or legal presumption of legal majority - is a third stage in broadening the meaning of the term.

The three-year AP rule in JL is a regulation of great antiquity. Varying conjectures about its origins found in the Mishna[3] (redaction second century CE) suggest that its historical origins were by then uncertain[4], and we must presume that it was already ancient.

However, the basic legal and conceptual facts regarding AP as presented in the Talmud are understood by the commentators in a consistent way, and nothing in the extensive discussion suggests that the rule underwent any evolution.

In the time of the Talmud (redaction seventh century CE), Babylonian Jewry was under the authority of a Jewish Exilarch, empowered by the non-Jewish authorities. Therefore, Jewish property law was in force for all judgments between Jews there, and there was a broad range of precedents to draw on, many of which are discussed in the Talmud.

Since the demise of the institution of exilarch, no Jewish ruling body basing its judicial system on Jewish law

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3 In the third chapter of Mishna tractate Bava Batra; see especially the first two Mishnayot.

4 That is, not only are there many different **theories**, but different **types** of theory, types that would not likely have evolved from a single imperfectly-retained tradition.

has had effective authority over real estate; indeed, in most places Jewish ownership of real estate was quite restricted. As a result few practical AA decisions have been handed down in the intervening centuries, though a great deal has been written about the rule. It seems that most "adverse possession" cases from the Middle Ages regard cases which would be considered in AAL as prescription rather than adverse possession, such as rights to a particular pew in synagogue.[5]

B. SUMMARY OF THE RULE

The details of the rule are basically the story of the shifts in burden of proof wrought by claims and evidence bearing on acquisition of the land. Land and the various rights attached to it are freely alienable in JL, and can be transmitted only through voluntary transfer.[6] Therefore, if there is a known prior owner, the current possessor occupies

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5 See Moses Isserles, **Mapah**, Shulhan Arukh Hoshen Mishpat 141, paragraph 8. (Henceforth "Rama", his Hebrew acronym.)

6 Certain transfers are **forbidden**, but even a forbidden transfer is **valid**. (Babylonian Talmud tractate K'tubot: 56a.) This contrasts with Medieval English law, whose many forbidden transfers were invalid.

The most important and famous restriction on the alienability of land in JL is the Jubilee which applies to property in the land of Israel under certain conditions of full Jewish sovereignty. Land is freely alienable only until the Jubilee year (every fifty years), and then returns to its original owner. See Leviticus chapter 25.

by right only if he acquired the right from this owner through a series of such transfers.

Fundamentally, without evidence of such acquisition, **JL considers real estate to remain forever in the presumed ownership of the last known owner**[7] irrespective of the current occupant. It follows that a subsequent owner bears the full burden of proof, and must theoretically retain documentary proof of his ownership - typically a deed of sale, or even a series of such deeds - indefinitely.

This corresponds to what is termed in Jackson a "derivation rule" for determining ownership, as opposed to the rule for chattels, which in JL are in the presumed ownership of their possessor[8] - a "negotiability rule" in Jackson's terminology.[9] Jackson concludes that these are the optimal transfer rules for real estate and chattels respectively; some of his reasons are adduced in early JL sources.[10]

However, early on it was decreed that prolonged and unprotested occupation of a property, combined with its

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7 The definition of "known owner" contains some subtleties, discussed in section IV of the paper.
8 Babylonian Talmud tractate Bava Metzia: 110a.
9 Jackson, 3.
10 See Moses ben Maimon, **Mishneh Torah**, Laws of Pleading, chapter 9 law 6; the reasoning is based on a passage in Bava Batra 33b.

exploitation in optimal fashion, may constitute a valid **substitute** for documentary proof,[11] although such occupation without claim of right does not constitute even **prima facie** evidence of ownership[12]. Occupancy in Jewish law never confers title, which is acquired, as mentioned, only through voluntary transfer or bequest.

Some commentators feel that the three years rule was not exactly a decree, but a formal recognition by the legal authorities that three years of possession in fact consituted sufficient evidence that possessor is owner. We will discuss how this could have come about without formal legislative action.[13]

In particular, **three** years of **uninterrupted** occupation at the level of **normal use**, if proven, stands in lieu of a valid deed in court, in the absence of a protest from the former owner.

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11 Solomon ben Isaac, called RaSHI, **Commentary to Babylonian Talmud:** Bava Batra 28a, s.v. "**Bet ha-shalahin**". More extensive references to all of these aspects are provided in the chapters devoted to detailed description of the rule. (This commentary will henceforth be cited as "Rashi" together with the tractate and page.)

12 Tosafot, **Notes to Babylonian Talmud** tractate Bava Batra 28b, s.v. "**Ela me'atah**".

13 See discussion in Aryeh Loeb ben Joseph ha-Kohen, **Ketsot ha-Hoshen**, section 140, paragraph 2, where he cites Nachmanides as a proponent of this view. (This work will henceforth be cited as **Ketsot ha-Hoshen**, or simply **Ketsot**.)

If an AF is proven, the burden falls on the plaintiff to prove that he made a valid formal protest, a simple declaration which can be made in front of two qualified witnesses anywhere. Such a protest has a powerful, perhaps unrebuttable, presumption of having reached the possessor within the statutory period, and therefore removes the excuse that the deed was neglected due to lack of any threat to possessor's title.

A **disability** exempts the once-owner from having to make a protest, and if upheld restores the burden of proof to the possessor. (A disability in legal terminology is any circumstance which would tend to prevent the party from taking appropriate action. The most important disabilities are common to JL and AAL: infancy (minority), insanity[14], couverture[15], and remoteness[16].)

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14 Or other mental incapacity, even temporary (in both legal systems).

15 The state of being a married woman. This disability applied until relatively recently in AAL, but is now not applied, although it seems to be still on the books in some states; see Callahan, 75.

16 There is an important distinction between with respect to the remoteness condition. JL only recognizes remoteness which is effectively incommunicado. Interestingly, JL and AAL have similar figurative names for the state of remoteness. In JL an inaccessible individual is called **bim'dinat ha-yam** - "in the sea republics", and in England he is **outre le mer** - "across the sea".

The commentators disagree on the location of the burden of proof in the case of a disputed disability claim.[17] A simple way of understanding the dispute: if lack of protest harms prior owner because it shows negligence, then disability disproves negligence just as protest does, and has the same burden of proof - on the prior owner. If possession entitles possessor because it should have induced a protest from a true absentee owner, then prior owner's disability is a shortcoming in the possession, and possessor must prove both possession and lack of disability.

So the burden of proof shifts as follows: Possessor (P) is presumed owner until prior owner (PO) proves his status. Then the burden falls on P to produce a deed. If he does so, PO can demand that P establish its validity (usually a simple procedure); a validated deed is nearly impossible to

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17 Jonah Gerondi, **Aliot d'Rabeinu Yonah** tractate Bava Batra (henceforth: Rabeinu Yonah): 29b, s.v. "**ata l'kamei**" says explicitly that the possessor must disprove a claimed disability, which follows from his understanding that the exemption in question there is in fact a disability. But according to the explanations of most commentators this exemption is not the same as a disability. Asher ben Yehiel (henceforth: Rosh), **Hilkhot ha-Rosh**, tractate Bava Batra, 3:6 places the burden on the owner to prove his disability. This follows from his understanding that a disability has the same status as a protest, which all commentators agree must be proven by the protestor. See Elhanan Bunem Wasserman, **Kovets Shiurim** (Tel Aviv: A.S. Wasserman, 5724 (1963/64)), **hezkat habatim** section 104, p. 223. (Henceforth: **Kovets Shiurim**.)

undermine. Absent a deed, proof of adverse possession restores P's presumption. PO must then demonstrate that he made a valid protest or claim that he was exempt from making one due to disability. If P can not overturn PO's proof of protest or claim of disability, he has no further recourse and must relinquish the property.

C. SCHOLARLY DISCUSSION OF AP

While nearly every aspect of the AP rule has attracted discussion and controversy, the most fundamental point of discussion among JL scholars, as well as for AAL ones, is: How exactly do we deprive the proven former owner of his property just because a certain amount of time has passed? By what right, and according to what criteria?

Three main theories can be discerned in JL sources, as outlined in the book **Kehilot Ya'akov.**[18] All are based on differing interpretations of the statement in the Talmud that the threshold is three years because buyers of real estate

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18 Jacob Kanevsky, **Kehilot Ya'akov** (B'nei Brak, Israel: Eshel printers, 5725 (1964/65)) on **Bava Batra** section 10, pp. 34-35. Some differences are found in other treatments, notably **Ketsot ha-Hoshen**, 140/2.

customarily exercise caution with written evidence only for that period.[19]

1. At one extreme is the view that by legislative fiat the early Jewish Sages decided that after three years we would no longer demand evidence from a possessor. Since care was normally exercised only that long, purchasers are vulnerable to fraudulent claims by PO's, and therefore it was necessary to regulate the market to protect them. However, in the presence of an earlier challenge we do demand that P watch his deed, and its loss is fatally suspicious. This view is held by the Rosh and the K'tsot.

Since according to this view the possessor is completely exempt from having to bring evidence after three years, in theory the burden of proof should be on the PO to prove that his protest was heard, thus nullifying the possession. But according to Maimonides, an unheard claim is simply too unlikely for us to credit possessor's claim that he was ignorant of the protest.[20]

Even though possessor is exempt after three years, if he heard a protest within three years his loss of deed is

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19 Bava Batra, 29a.
20 **Mishneh Torah**, Laws of Pleading 11/5.

deemed negligent, and he is punished so to speak with loss of his land. We call this view "laches of deed". (Laches, cognate with lacuna, means "culpable negligence".)

2. At the other extreme is the view that three years of silence by the PO **per se** constitutes positive **prima facie** evidence that PO has transferred title, since it is simply unnatural for a true owner to be silent so long in the face of an adverse possession. The only reason the PO waited three years to make his complaint is because he knows that until then P is likely to still have a deed, but longer than this P is careless. This is the view of Nachmanides, who explains, "His [PO's] silence was not gratuitous."[21]

In this view, even though in principle the presumption of proof is forever on the side of the PO, a very long silence is deemed negligent; we call this view "laches of protest".

3. An intermediate view is that while three years of possession without protest would not **a priori** constitute sufficient evidence of lack of ownership, in the **presence** of a rule rewarding such possession the silence of PO until the period expires is indeed convincing evidence against him. So

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21 Moses ben Nahman, **Hidushei ha-RaMBaN** tractate Bava Batra, 42a, s.v. **ha d'ita.** (Henceforth cited as Ramban.)

in the actual event of dispossession we can be confident that we are acting justly.[22] This properly reflects the fact that **both kinds of laches are dependent on the rule.** It is not negligent to lose a deed which the law no longer requires because of the negligence of the seller; nor is it negligent to delay protest to some time when the law continues to demand a deed from the putative buyer.

In principle, these positions should rule differently in certain exceptional cases. For instance, suppose PO failed to protest, but a spurious protest in fact reached P, who nonetheless lost his deed - a double laches. We would expect the first view to favor PO, since P failed to meet the requirements of the regulation which therefore would not apply, and the second view to favor P, since we have **prima facie** evidence of sale as required.[23] But one must be very

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22 This view does not appear **explicitly** in any early commentator, but modern scholars consider it the view of many early commentators. Aharon Cohen, **Bet Aharon** (Jerusalem: Committe for the publication of the writings of the Gaon Aharon Cohen, 5743 (1982/83)), 175-176 explains that this is the view of Maimonides, and **Kehilot Ya'akov Bava Batra** section 10, pp.34-35 explains that it is the view of the **Nimuke Yosef.** It is a very appealing theory, since on the one hand it is unusual for the early Sages to uproot property rights without positive evidence, but on the other hand it is hard to believe that a three years' silence is weighty evidence even in the **absence** of a fixed rule which penalizes it.

23 Other borderline cases: where P can prove that the loss of his deed was not due to his negligence (including the case where he can prove he heard no protest) - the first view favoring P and the second PO; where three years have passed now but we can prove that the deed was lost earlier, which is a case of double negligence like that in the text.

careful with such extrapolations, since the contrary evidence may be taken into account in various ways, and furthermore once we make a rule we may stick to it even when its specific provisions are not completely in line with its **raison d'etre.**

The first two views, which postulate a laches not dependent on a legal fact, require some explanation. If not the three years rule, why do we excuse a possessor careless with his deed after three years? And why do we look askance at an absentee owner who delays protest, if the land remains in his presumed ownership anyway?

The simplest explanation is that there is some exogenous factor of the economic environment which justifies these judgments. For instance, let us suppose that the presence of a new resident who acts like possessor tends to erode the neighbors' memory of any prior owner. (As explained in section IV, PO relies on the testimony of these neighbors to establish his status.) But suppose that a protest by the former owner reminds them, and reverses such erosion.

After some period of time PO's recognition will decline so must that it is not worth it for P to continue to invest in supervising his deed.

Independently, PO's will invest in protesting early (his cost of doing so is analyzed at the end of section V) to the extent that after some threshold it is most likely that the protestor is not a true owner but a Seller trying to catch Buyer without evidence.

Even if the rate of forgetting is quite small, as it is likely to be, if the rate of fraudulent claims is small enough, we can justify P's carelessness with this model; and if the cost of protest is small enough, we can so justify PO's investment in early protest.

This model not only explains a laches exogenous to the legal rule, but it explains how the two laches are effectively independent, as views 1 and 2 emphasize; there is no reason for the threshold for buyers carelessness should be the same as for absentee owner's haste.

The reliance on a single primary factor, seen in explanations 1 and 2, is characteristic of law, which depends on tight definitions to decide the borderline cases which account for most litigation. A more economistic viewpoint is as follows: **The evidence which accumulates with time in favor**

of the possessor is two-fold. First, laches in losing a deed becomes progressively less damning. Second, laches of a once-owner failing to protest becomes progressively more suspicious. In general, AP only applies if both laches are present (since a deed makes AP superfluous and a protest nullifies it completely). **After a certain period of time, the mounting evidence in favor of the possessor will exceed some threshold** which is determined by factors exogenous to the specific case of AP.

However, this model is not sufficient to explain the commentaries which hold views 1 and 2, and yet specifically state that the laches are interdependent, as they are in the case of 3 where both derive from the unitary statutory threshold.

This approach is particularly evident in the commentary of the Rashba, in the following passage[24]. Brackets enclose my additions.

> Since the former [that is, the absentee owner] **knows** that he [the buyer] exercises caution no longer, if he failed to protest within three years he appears to be scheming, by remaining quiet until the other [the occupant, in this case a buyer] has lost his evidence [a deed of sale]. And

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24 Solomon ben Abraham Adret, **Hidushe ha-RaSHBA** tractate Bava Batra 29a, s.v. "Ela amar Rava." (Henceforth "Rashba".)

this is what the discussion concludes, that the reason for the three years is that for three years one exercises caution [with a deed], but not for more than three years. However, this reason is intertwined with the consumption of output, for mere plowing [for example] does not qualify for AP nor does possession without net enjoyment. And the reason of the thing is, that the reason of three years - and no more - of caution is not employed as a rule with no basis, but is dependent on another cause, namely, that since most people are sensitive to three years of [unauthorized] possession, according to the other reason of Rava [laches of lack of protest], and to a lesser period are not sensitive - therefore the buyer is concerned and is careful with his evidence the entire three years, for he says to himself: perhaps he [the perhaps-illegitimate seller] will still come any time and and sue me. But after he sees him [the seller] remain quiet the entire three years he is sure that he will no longer bring suit and thenceforth is not careful with his deed. Therefore, anyone who uses the property in an unusual way, for instance sowing without plowing or not consuming the output but merely plowing, or else failed to produce a net gain, such a buyer remains cautious, for he is concerned lest the [former] owner wasn't concerned to protest or sue because he didn't consume three years of normal output.[25]

It seems to me that to explain these commentators we have to recognize a natural extension in the concept of negligence. In the law of damages, the most common arena for the idea of negligence, the term refers to failure to perform an action whose obligation stems from either of two sources: a **regulatory** obligation or an **objective** obligation. The law

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25 Rashba, Bava Batra 29a, s.v. "Ela amar Rava."
While the views brought above were summarized, this explanation was cited in full because it is relatively self-contained and very nicely illustrates the "equilibrium" point of view familiar to economists; and in order to bring at least one example.

mandates specific ways in which agents must exercise caution - for instance, buildings must have sufficient fire exits - and further mandates caution generally. In JL, at least, even someone who specifically conforms to a regulation is liable for damages resulting from his carelessness.[26]

The definition of [objective] negligence in damages, according to Posner[27], is failure to make an expenditure which is the least expensive way of avoiding a greater loss - even a loss to another party. **This definition of negligence can be applied to the absentee owner who fails to protest as early as he can**, though the loss involved is rather more subtle.

If we assume that the three year rule is the most efficient (which certainly seems to be the basis of view 3), it follows that it is less expensive for PO to protest within three years than it is for us to demand that P keep his deed more than three years. Shortening the period would increase costs to PO more than it would reduce cost to P; a longer period would cost P more than it would save PO.

Now, let us assume that no statutory rule is in force. Even though PO claims he is an Absentee Owner (and not a

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26 Bava Batra 20b, where the opposite opinion is a rejected minority view.
27 Posner, 2d ed., 148.

seller), so that P is a Squatter (and not a Buyer), from the point of view of P's claim PO would be negligent in protesting later than three years, since if he limited protests to within three years he would save P a loss (in investing in watching his deed) greater than his own investment. Alternatively, P is justified in ignoring his deed after three years; the cost of uniquely identifying the true owner is more economically borne at that stage by PO; an earlier loss is negligence on the part of P. A disability indicates an unusually high cost of protesting, so that a delayed action is not negligent - that is, not inefficient.

The application of the concept of negligence to the case of AP is discussed at length in section V. The main point to be made here is that such a novel application of the concept of negligence, that globally inefficient behavior is "unreasonable"[28] even when costs are not obviously imposed on a given party, seems necessary to explain the JL commentators who explain the laches of protest by PO as "unreasonable" behavior, even though the law supposedly protects such a PO.

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28 Posner 2d edition, 148.

D. PRESCRIPTIVE EASEMENTS

An **easement** is "a right over land, appurtenant to other land".[29] That is, a right to a specific use on another's property which the (typically adjacent) owner is entitled to by virtue of his ownership. Typical examples are rights of way, air rights, and drainage rights. An easement can come into existence by grant or deed, by legislation, or "a right may come into existence by **prescription**; that is, by long enjoyment as of right."[30] The close relation between prescriptive easements and adverse possession should be obvious; in both cases a right to use land is secured by prolonged exercise of the right. It is worthwhile therefore to devote a short section to examining prescription in JL.

PRESCRIPTIVE EASEMENTS IN JEWISH LAW

JL law recognizes about the same easements as AAL - rights to privacy, light,[31] to view, to passage, to freedom from pollution,[32] and so on; and these rights are freely

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29 Eric Poole, **English Property Law** (London: Charles Kinght and Co., 1973): 77.
30 Poole 84,85; emphasis mine.
31 Bava Batra 22b.
32 Bava Batra 23a.

alienable. Like AP, they are discussed primarily in the third chapter of Talmud tractate Bava Batra[33], though references are found elsewhere.

However, unlike AP where title can definitely not be obtained through possession without a rebuttable claim of legitimate title, the commentators are split on the question of prescriptive easements. Rabeinu Vidal of Toulouse[34] explains that the Gaonim (very early Medieval Babylonian scholars) and the Medieval Spanish commentators - Maimonides[35], Nachmanides and others - hold the view that a prescriptive easement could be obtained without a claim of right, under the presumption that the failure of the owner to protest (acquiescence) consitutes tacit agreement to convey - a virtually non-rebuttable presumption. But the French commentators - such as Rashbam[36] - hold that prescription is the same as AP: an easement is only acquired after three years of adverse use accompanied by a claim that the easement was validly and explicitly obtained.[37]

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33 See especially Bava Batra pages 58a-60a.
34 Rabeinu Vidal of Toulouse, **Maggid Mishneh** on **Mishneh Torah**, Laws of Neighbors chapter 11 law 4.
35 Laws of Neighbors, chapter 11 law 4. (This commentary will henceforth be cited as **Maggid Mishneh**.)
36 Solomon ben Meir, **Commentary to Babylonian Talmud** tractate Bava Batra, 57a, s.v. "**Elu dvarim**". (Henceforth "Rashbam".)
37 This relates back to the topic brought up in note , namely the kind of transfer rules appropriate to different kinds of property rights. The reference there to Maimonides' **Code** explains that possession of land is not decisive evidence since we expect in any case that there is documentary evidence; this would explain why he accepts possession as evidence of ownership of an easement, since easements are not ordinarily sold through written contracts.

It seems that this difference in opinion has its basis in the question of whether an easement is effectively a kind of land ownership or merely a kind of right. The French commentator Rashbam explains that a possessor of an easement "is as if he is physically possessed of his fellow's land";[38] it must follow that all the details of AP apply. Whereas according to the view that an easement is not real estate, it automatically follows that it can be acquired by acquiescence, since only real estate is impossible to purchase this way. Other forms of property are in general presumed to be conveyed by tacit agreement as soon as we are sure that the owner is aware that someone is adversely possessing his property, if he does not protest.[39] The amount of time required must be interpreted according to the circumstances.[40]

The accepted view today, according to leading scholars, is in accordance with the view of Maimonides' **Code** and the other Sepharadi commentators, namely that prescriptive easements can be acquired by acquiescence, and almost immediately.[41]

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38 Bava Batra 57a, s.v. **elu dvarim.**
39 See for example tractate Bava Metzia, 6a.
40 **Maggid Mishne** Laws of Neighbors 11/4.
41 Joseph Caro, **Shulhan arukh**, section **Hoshen Mishpat** 155/35, commentary of Rama there, commentary of Taz. See discussion in Isaac Herzog, **The Main Institutions of Jewish Law**, 2d ed. (London: Soncino Press, 1965) volume I, 368-370.

III. THE RULE OF ADVERSE POSSESSION IN ENGLAND AND AMERICA

A. OWNERSHIP AND SEISIN

The starting point for AP legislation in JL was the utter supremacy of demonstrable right of ownership over possession; later on, possession came to be considered evidence of right. AAL began near the other extreme - the supremacy of possession, which often overcame ownership and to a great extent even defined it.

Modern law generally recognizes the following three distinct concepts: **Ownership** is an abstract, enduring, exclusive legal right to the enjoyment and disposal of a good - a person/object relationship.[1] This is completely distinct from the current **right of use** the good, which can be acquired from the owner in a person/person relationship such as a

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1 Of course, this is really a relationship between the owner and all other members of society regarding the object; but in any case the owner has a unique relationship to the object in the eyes of society. Cf. Callahan, 29; J.B. Ames, "The Disseisin of Chattels - III," **Harvard Law Review** 3 (March 1890): 339. (Sections I and II of the article are in the same volume; the articles are cited as Ames I, Ames II, and Ames III.)

lease. Finally there is the actual physical **fact of possession**, which may be tortious, without owner's consent.

The distinctions among these categories are not however so sharply drawn in feudal law, such as prevailed in Medieval England. Private ownership did not exist,[2] and rights to the enjoyment of land were in many ways similar to a contractual relationship between the holder and his lord,[3] and furthermore depended crucially on physical possession. And the exceeding conservatism of English common law left Medieval ownership concepts the basis of land law until the nineteenth century, and to a certain extent until today.[4]

English property law revolves around the concept of **seisin**, from the same root as "seize". Seisin refers to a possession (exclusive physical occupation of land) which is not subordinated to the right of some other individual. It

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2 Cf. Tyler, E.L.G. and N.E. Palmer, **Crossley Vaines' Personal Property** (London: Butterworths, 1973): 40: "[A] man may "own" a fee simple estate in Blackacre; the absolute ownership in the soil is in the Queen - if it is anywhere; for it is better to eschew the term "ownership" with regard to land as distinct from estates therein."

3 This is not only true of an unfree tenant known as a copyholder, who did not technically own his plot, but also of a freeholder, who as the name suggests held his land as a freeman; all land had to be held of some lord. Harold Potter, **An Historical Introduction to English Law and its Institutions** (London: Sweet and Maxwell, 1948): 489.

4 The above citation from Tyler and Palmer is from 1973; see also Callahan, 38.

follows that there are two kinds of seisin: possession by the owner (or claimed owner), and possession as against the owner, which is **adverse possession.**

For example, a possessing owner automatically has seisin; a lessee certainly does not have seisin, since his possession is through the lessor; most importantly, a **dispossessor** may or may not have seisin. When his possession becomes a recognized legal reality, even if illegal, the dispossessor becomes a **disseisor,** and the dispossessed a **disseisee.** This occurred in Medieval English law after four days of dispossession; thenceforth entry by the owner was felonious.[5]

All property rights in English law depend on seisin, and "as long as the disseisin continues, the disseised owner is deprived of the two characteristic features of property, - he has neither the present enjoyment nor the power of alienation."[6] He has only, perhaps, the right of recovery, itself inalienable until the nineteenth century.[7] **Practically, ownership is equivalent to seisin.**

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5 Potter, 491.
6 Ames I, 25.
7 Callahan, 56.

In order to recover seisin, one must demonstrate disseisin, which has two parts: proof of physical dispossion, and proof that it was without consent.

But seisin was not at all easy to recover, even when the disseisee could unequivocably demonstrate his right. This is more easily understood in light of the likeness of feudal property rights to contract. If a contractor with a valid agreement is physically displaced by a rival, who begins to perform the work and collect payment, the contractor of right has some legal recourse, but his right to resume work on the contract is far from assured.

B. RECOVERY OF DISSEISIN AND ITS TIME LIMITATION

In the period immediately following the Norman Conquest, a disseisee would have to bring a complaint to the local feudal court. This court did not necessarily meet frequently, and it was administered by lay individuals with no necessary expertise in law. Numerous effective delaying tactics were available to the seissor, who had the law on his side. Even when the disseisee managed to get his day in court, and supposing the judges found merit in his claim, in order to regain his inheritance he (or his hired champion) would have

to emerge victorious against the alleged disseisor (or hired champion) in judicial battle, which was "the normal mode of proof in disputes relating to the ownership of land".[8] Here his chances were less than even, since if neither combatant was vanquished by nightfall, a very common occurrence, the defendant was upheld.[9]

The procedural situation improved greatly with the incursion of the Royal Courts in local jurisdictions, in the time of Henry II (late twelfth century CE). Judges were trained jurists, and trial was by jury. This successful incursion represents the victory of the Common Law, which was one law - the King's - common to all Englishmen. Land has remained ever since in the jurisdiction of the Common Law.

Jurisdiction in land disputes belonged technically to the local manorial court, and to bring a suit directly to the Royal Court would be a forbidden usurpation of jurisdiction. This technicality was circumvented through the use of **writs**. A writ was a document which ordered the lord to do justice

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8 Potter, 314.
9 Potter, 315. Even criminal cases were tried by battle, ordeal, and compurgation (oath of defendant and supporting witnesses), but in these cases discretion on the part of the judge as to the method of ordeal - which did not exist in the case of land - may have amounted to **de facto** trial by judge. One deemed guilty would be "tried" by dangerous ordeal, and one deemed innocent by simple compurgation. See Potter, 316

promptly to the suitor who obtained the writ, and "ended with a threat that in default of his so doing the King would take the matter into his own hands."[10] This threat was as often as not a mere formality, and through the use of writs jurisdiction was rapidly concentrated in the Royal Courts.[11]

But only a small number of distinct writs existed, each fitting a narrow set of circumstances and requiring a characteristic rigid judicial procedure. In the exceedingly conservative English legal system all innovation was slow to come, and the lords especially opposed the proliferation of writs, which impinged on their jurisdiction (which was a source of income).

The specific writ introduced by Henry II to be used in cases of disseisin was the **Writ of Right,** which as its name suggested determined which of the two parties had a better right to the land in dispute. Accompanying writs either brought the case into the Royal Courts, or ordered the manorial court to summon a jury, known as a Grand Assize, to try the case, in place of trial by battle. **A statute of limitations was introduced into the Writ of Right in 1275,**

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10 Potter, 490.
11 Though not completely concentrated. Small cases in particular continued to be brought to the local courts, which persisted for hundreds of years.

prohibiting basing an action on a seisin preceding 1189[12]**. Thus the doctrine of adverse possession entered English law;** any wrong (disseisin) committed before 1189 became in 1275 a right. The base year was advanced from time to time, and in 1540 a flat sixty-year limit was established on the seisin claimed in a writ of right.[13]

Action based on the Writ of Right decided ownership as between plaintiff and defendant. **Parallel actions** of Novel Disseisin and Mort d'Ancestor, introduced in the same era,[14] were a purely possessory remedy; that is, the plaintiff asserted that he (or his ancestor) was disseised, and if this claim was upheld the plaintiff's possession was restored.[15] This possessory judgment was not final insofar as the losing party could still bring a Writ of Right, but the procedure in

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12 This rule is technically different from a true statute of limitations, since it is based on seisin and not on disseisin, which is the original **cause of action.** The clock on a true statute of limitations starts running from the initiation of a cause of action. Even if the **current** occupant had disseised recently, the writ of right would protect him if the original seisin had terminated prior to 1189.

13 William F. Walsh, "Title by Adverse Possession - I," **New York University Law Quarterly Review** 16 (1938): 532.
14 Potter, 491.
15 This sounds like the JL base case: the plaintiff needs only prove that he had seisin to place the burden of proof on the occupant. But a former seissor is not automatically a disseisee; to achieve the latter status the disseisin must be without his consent, and this was up to him to substantiate, though the standard of proof was less than in JL. See Potter, 494.

the possessory actions was less cumbersome and hence they were more popular. These actions were limited by the same statutes as the Writ of Right, though with slightly shorter thresholds.[16]

However, even the 1540 statute did not establish a consistent statute of limitations on actions against adverse possession, since in the meantime a **third** type of action had grown up and came to dominate such actions - the action of **ejectment** (so called because it depended on a legal fiction that an imaginary lessee named John Doe had been ejected from the premises by the fanciful Richard Roe[17]). This action was procedurally the most satisfactory and had the most "customers", and was not limited until 1623. **In 1623 a twenty-year statute of limitations was established on all actions for the recovery of land.** The stated purpose of the statute: "For quieting of men's estates and avoiding of suits."[18] This statute is the direct source of the modern adverse possession rule, and the basis for the many American states, including most of the original thirteen colonies, which still had twenty year statutes of limitations in 1938.[19]

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16 Walsh I, 532 says that the base for Novel Disseisin was 1242 and for Mort d'Ancestor 1216, and that in 1540 a fifty-year limit was placed on these actions. Potter, 491 differs slightly.
17 Potter, 498.
18 Walsh I, 532.
19 Walsh I, 534.

The Real Property Limitations Act of 1833 changed some of the requirements but not the duration of the statute of limitations. **In 1874 a new Act lowered the period to 12 years** in England. These statutes expressly indicated that after the running of the statute of limitations the title, as well as the remedy, of the old owner was extinguished.[20] The commmentators seem to agree that **the English AP rule is a simple statute of limitations,** barring action twelve years after there is a cause of action, namely an unauthorized and hence adverse possession. [21]

C. EFFICIENCY, PROCEDURE, AND THE COMMON LAW

What we have seen of procedure and its evolution in English law prompts an observation of the greatest interest, which is therefore not relegated to a footnote even though it is not directly related to adverse possession in particular.

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20 Paraphrase of Callahan, 50.
21 See for example Callahan, 55, Ames II, 318. This is not at all the same thing as an unauthorized **entry**, and indeed many adverse possessions in AAL originate in authorized entry such as lease or life tenure. In JL most authorized entries are by definition not adverse possessions, so there is more overlap between unauthorized possession and entry for the purposes of AP.

Richard Posner describes as follows the efficiency theory of common law: "The theory is that the common law is best (not perfectly) explained as a system for maximizing the wealth of society." (**Economic Analysis of Law** 21). English common law is at once the best and worst example of this theory.

An examination of the innovations in the Common Law suggests that there were tremendous incentives to efficiency-increasing innovations. There was great competition among lawyers to find remedies for the many wrongs which fell "between the writs". In addition, Medieval England had several overlapping jurisdictions - Manorial law, Chancery, Law Merchant, Equity, and others, in addition of course to the Common Law. There was great competition for customers (and their court fees) among the various jurisdictions, and this added an additional incentive for innovation virtually unique to England. On the incentive side, it seems that England is a prime example of the efficiency theory.

And the record indeed indicates corresponding ingenuity in inventing remedies. This occurred by stretching existing concepts, for instance, to consider trespassing "force of arms"[22] or threatening language a "breach of peace"

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22 Potter 285.

[23]; by the admission of new writs[24]. Especially interesting was the extensive reliance on **legal fictions,** accounting for the huge number of cases in which plaintiff, defendant or even both were non-existent (typically John Doe and Richard Roe) and the extension of the role of certain court officers to perjure themselves when necessary to uphold a conventional fiction.[25]

Yet due to the inherent rigidity of the system all of these incentives made their mark with the most astonishing sluggishness. The system was virutally a slave to its cumbersome procedural protocols. Not until the late fifteenth century was it established that damages could be collected for breach of promise, as "the pressure of the needs of the community and the rivalry with the Chancery made this extension essential."[26] So on the practical side, English common law was not so responsive to efficiency considerations.

It would seem fair to conclude that **most common law innovations are best explained as devices for improving efficiency;** but **the Common Law treatment of a given economic**

23Potter 292.
24Potter 291.
25 Potter 301-302. Casner and Leach 58-59 present many sobering examples of the extent of fictions in land law and elsewhere in English law.
26Potter 458

institution is not necessarily molded by efficiency considerations. On the whole, Posner's theory has tremendous support for the era in which he on the whole applies it, namely from the nineteenth century on,[27] when the law had evolved both specific institutions and general flexibility.

The response of the judicial system to the demand of consumers is in the direction of better or more efficient justice to the extent that remedies that increase wealth are more highly invested in. In general, there is also a danger that influential interest groups will seek purely redistributive gains via the courts. Netter et al. claim that AP is partially immune to this problem, since "in this area it would be difficult for interest groups to know exactly what they wanted. That is, a person does not know for certain which side of the problem he many eventually be on." Therefore, "legislatures[28] might find in this case that interest groups are in favor of rules which ease land transactions and maximize the value of land."[29] So there is an extra reason why the evolution of AP could be expected to be guided by efficiency considerations.

27Posner 21.
28 In the case of the common law, judges.
29 Netter et al. 220.

Netter et al.'s point applies to any regulation where the parties to the regulated transaction tend to belong to the same class, which is a large body of regulation. In addition, to the extent that the influence of interest groups is proportional to their prospective gain - for instance, if influence is for sale - redistributive motives will tend to cancel out leaving only efficiency considerations. So **there is very good reason to expect that response of courts to litigant demand will be in the direction of increased efficiency,** especially in the case of regulation of voluntary trade where apart from competitive considerations it is in the interest of parties to set up the most efficient conditions of trade since these efficiencies are reflected in the purchase price.

The main danger would be if some groups have low transactions costs in purchasing influence; if they value considerations other than wealth, for instance relative social position; or if they constitute a monopoly in some market.

D. BURDEN OF PROOF AND STANDARD OF PROOF AS COMPARED WITH JL

Let us compare the ostensible burden of proof in AAL

with that of JL. In AAL, the burden is **immediately** on the plaintiff to prove that he was disseised. When the AP threshold is passed, even this proof is inadmissible; thus, the limitation automatically protects even a tortious disseisor. The basic principle of AP in AAL is that when a tortious possession meets certain conditions for a specified period, legal action by the owner is barred and his claim is effectively extinguished. "**Every adverse possession is a wrong amounting to an inchoate right.**"[30]

Therefore, **the initial three year period in JL,** during which possession creates no presumption against a known prior owner, **has no parallel in English law.** The following period, during which only proof of disseisin suffices to recover ownership in Jewish law, corresponds to the situation in English law immediately following disseisin. **And the period in English law following the adverse possession threshold,** during which all legal remedy of the disseisee is extinguished, **has no parallel in JL.**

The distinction based on burden of proof has been purposely overstated to emphasize the purely **technical**

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30 Ballantine "Title" p.150. The phrase is in quotes in the article, but without attribution. Evidently it is a folk saying in AA jurisprudence.

difference. Practically, the gap between the rules is not great, partially because of the difference in the **standard of proof.**

Let us start with the situation before the threshold is reached. In JL, the possessor must prove that he occupies by consent of PO; whereas in AAL the PO must prove that possessor does not so occupy. However, whereas JL has very exacting standards for admissibility of evidence and a high standard of proof, AAL accepts virtually any evidence which may bear on the case, and demands only a **preponderance of evidence.** Since in most cases a possessor by right, especially within three years of entry, can easily bring evidence of title or lease; and since in AAL it will in general possible to amass a preponderance of evidence against possessor when in fact he has no permission, the difference between the systems is not very significant.

After the threshold is passed, we have mentioned that JL does not entirely extinguish the PO's right, unlike AAL. But due to the high standard f proof, it is quite difficult to overturn a presumptive title, so that "We may say that such a title is rebuttable, but in the majority of cases it is hardly

rebuttable."[31] Again, there is rough correspondence between the systems.

The whole question of the relationship between the standard of proof, the burden of proof, and the admissibility of evidence is a vital question in Law and Economics, touched on in several works[32] but not too my knowledge dealt with in depth.

Posner points out that a high standard of proof - making an error in one direction much more likely than in the other - is appropriate where the cost of an erroneous outcome is much higher in one case, as in criminal cases. We may add that it is equally appropriate where the cost of **avoiding** the error in one direction is much higher; this latter formulation fitting cases where the evidence is in the control of the parties to the dispute.

If the chosen AP threshold is efficient for discerning true owner, then it is true by assumption that the least-cost avoider of error until that threshold is the possessor, from then on the prior owner. It must then be efficient for a higher-than-preponderance standard of proof to be on the

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31 Herzog I 228.
32 See Posner, chapter 21; Jackson 3.

possessor until the threshold, and on the PO thenceforth, as is the case in JL. In theory a "sliding scale" of standard of proof would be in force, starting with very high standard for P, and after many years having a very high standard for PO.

Likewise, for AAL where for structural procedural reasons a preponderance standard is in force for civil cases, it is necessary to completely close off PO's recourse to the courts at the end of the threshold time, since an intermediate standard of evidence is not available - only preponderance or nothing. The necessity for a long threshold is a corollary, since only after a fairly long time is such a "strict" standard - an unreachable one - justified.

We have shown that **structural procedural considerations regarding the standard of proof demanded in civil cases implies a longer threshold in AAL**, where a preponderance standard is in force, **than in JL** where strict proof is necessary.[33]

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33 One may still ask why these standards of proof were adopted in their respective systems. It seems to me that there is an ideological basis for the distinction. In JL agents must plan their transactions carefully if they want to be able to prove them afterwards to a court; then the court's job of evidence-gathering is comparatively straightforward. American law is inclined to let people act as they wish; this compels a larger investment if litigation occurs and the court must sort out the pieces. This divergence suits the general philosophies of the two systems: JL, which has no reservations about placing obligations on those subject to it, and AAL, which in general tries to minimize the extent to which government dictates private actions.

E. ADVERSE POSSESSION IN THE UNITED STATES AND ITS SCHOLARLY DISCUSSION

The original American statutes were by and large like the revised English ones, providing for simple statutes of limitations. Most of the original states provided for a twenty-year limit[34]. However, **almost all American statutes added specific positive conditions on the possession itself.** "In America, however, the adjectives and phrases qualifying the nature of the possession required in order to work the magic, appeared at an early date."[35]

These conditions are agreed to be five, and the sub-components of the five are more or less agreed upon, but the permutations are nearly spanned.
For example: open, notorious, continuous, hostile, and adverse (Callahan[36]); hostile and under claim of right, actual, open and notorious, exclusive, and continuous (Helmholz[37]); hostile or adverse, actual, visible notorious and exclusive, continuous, and under claim or color of title (Ballantine[38]).

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34 The vast majority - nine. Most of the rest provided for fifteen years. See Walsh I, 534.
35 Callahan, 50.
36 pg. 44.
37 p.334
38 "Claim", 219.

This list is criticized in the literature.[39] Obviously there is some confusion as to the distinct identity of the "five" positive requirements. Furthermore, only "notorious" and "continuous" are conditions on the physical possession. "Actual" is superfluous[40], and "hostility" is a mental attitude. "Claim of right or title" is redundant, since such a claim is exactly what makes the possession hostile; there is no tnreat from a possessor who asserts no rights against the owner. (Helmholz, as we have seen, identifies hostility and claim of right.) "Exclusive" is part of adverse, since a co-tenancy is presumptively not adverse.

HOSTILITY

The main controversy in the literature is the question of hostility, or claim of title. On the one hand, commentators of the last seventy years are nearly unanimous in claiming that practically there is no such requirement in America,

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39 Ballantine "Claim" p.219, note 1; Callahan 50-73.
40 It is meant to exclude a "constructive" possession, which is a legal fiction. But since constructive possession can only be attributed to owner, an adverse constructive possession is impossible. See Casner and Leach, 59-60.

statutes to the contrary notwithstanding;[41] and those who do perceive it are nearly unanimous in urging that it be eliminated, whatever it is.[42] Helmholz[43] has argued that the courts are ignoring the commentators (and evidently vice-versa, since the commentators are supposed to be explaining court decisions), and that intent remains a concern of the courts; his conclusions have been vigorously challenged.[44] It seems that the concept of hostility in AP in the United States, while repeatedly declared dead, has refused to stay buried.

The question of "hostility" is the question of the frame of mind of the possessor - with what intent has he occupied[45] the property. Surprisingly, it has turned out to be far easier to establish what that state of mind is than to

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41 Walsh "Title" I 538, II 44; Helmholz "Adverse Possession" 332: "The American Law of Property, the Restatement, law review articles, and presentations in standard hornbooks all advance" this view.
42 Callahan 73 (despite his disclaimer); Merrill "Property Rules" 1136: "the leading opinions, treatise writers, and casebook editors all generally declare that the subjective state of mind of the AP should be irrelevant"; Helmholz, 357: very likely "little would be gained and something good might be lost" by expressly requiring good faith.
43 R.H. Helmholz, "Adverse Possession and Subjective Intent", 61 Washington University Law Quarterly, summer 1983.
44 Cunningham, "More on AP", 64 Washington University Law Quarterly 1986. Among other things, Cunningham shows that there are actual errors in Helmholz's data - that is, he confused case outcomes in certain cases.
45 Occupied, not entered.

establish what exactly it is **supposed** to be. Does he need to think that he does not own the property (Maine rule)? Or perhaps it is even better if he thinks that he **does** own it (Connecticut rule)? Or perhaps it is enough that he **wants** to own it.[46]

A pointed illustration of the confusion which has reigned on this point is brought by Callahan in the case of **Van Valkenburgh v. Lutz**[47]. In 1912, William Lutz purchased an undeveloped plot in Yonkers New York and together with his family began to clear and exploit both his land and an adjoining tract. In 1948 the new owner of the adjoining tract tried to eject the Lutzes. Among various improvements, Lutz had built a house for his brother Charlie entirely on the adjoining plot, and had built a garage on his own plot which turned out to encroach over the lot line. The facts of the case were at no time in dispute. The Lutzes claimed title by adverse possession, were victorious, but lost on appeal, on the grounds that the possession was not "hostile." Why not?

"Charlie's house" was not hostile, in the words of the New York State Court of Appeals, since "as Lutz himself testified, he knew at the time that it was not on his land."

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46 See Helmholz 339.
47 304 N.Y. 95, 106 N.E. (2d) 28, 1952. Cited in Callahan 3.

The garage, on the other was not hostile, since "Lutz himself testified that when he built the garage he had no survey and thought he was getting it on his own property, which certainly falls short of establishing that he did it under a claim of title hostile to the true owner." What is going on?

In the case of the house, the court explicitly applied the definition of hostility which identifies it with "claim of title", which was ruled lacking since Lutz did not claim the land was his. The definition of "claim of title" used was **ex ante** claim, usually known as a "good faith" claim. But the "claim of title" often identified with "hostility" is the **ex post** claim, which is the same as intent to acquire title, clearly present here, and this seems to be a source of confusion.[48] However, the garage ruling correctly applies the "Maine rule" definition of "hostility/claim of title" that the **possession itself** constitutes a new and hostile claim of title.[49]

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48 An **ex ante** claim means that the possessor entered understanding that it was his land, and this is the same as "good faith". The text explains that this is not the kind of "claim of right" identified with hostility. An **ex post** claim means that the possessor intended his possession to establish his ownership, and this entails hostility. The claim of right required by JL is different from either of these; at the time of the case the possessor must support **ex post** his **ex ante** claim, in other words he needs to show not only that he entered on the understanding of ownership, but that this understanding was correct.

49 This illustrates one reason the Maine rule has fell into disfavor - it requires a "bad faith" claim! The possessor must intend to acquire ownership by his occupancy.

The main theories as to what intent is hostile are as follows, in increasing order of the strength of the possessor's claim.

(1) There must be **no specific disclaimer of intent** to claim title.[50]

(2a) There must be **intent to claim** title, that is, to be owner.[51]

(2b) There must be intent to claim title by AP, that is, one must know that the possession is a trespass and intend the trespass to ripen into title[52]

(3) There must be "subjective good faith," that is, a sincere and well-founded **belief that one is actually the owner** of the property.[53]

As mentioned, most commentators feel that (1) is sufficient, since no specific frame of mind is required of the possessor.

LACHES

The question of the "decisive laches" discussed in connection with JL appears also in AAL. Of course, the "laches" of the possessor in AAL would not consist in losing evidence of title, since AAL does not care if he ever had

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50 Walsh I, 549.
51 Ballantine, "Title", p.223.
52 The "Maine rule", see above.
53 Helmholz, 332.

title. The possessor can only fall short by having a possession which is not as adverse as might be demanded.

Many writers quote - and dispute - the view of American jurist J.B. Ames, who asserted in an 1890 article that "English lawyers regard not the merit[54] of the possessor, but the demerit of the one out of possession."[55] This statement, categorical with respect to English law, was intended to characterize American law also.[56] A typical rebuttal is that of Walsh: "most of the cases cited by him for this rule either do not sustain him or are overruled by later cases".[57]

Ames' assertion is that the thrust of the statute is that the clock is running on the owner from the time an adverse possession begins; the character of the possession

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54 Of course, "merit" is not necessarily to be taken literally, since it is not meritorious to adversely occupy land not belonging to you. Cf. Callahan, 90: "[T]his is simply an assertion of fact about the technical approach. Such statements are not, I believe, intended to be assertions that the purpose of the business is to punish the neglectful owner."

55 Ames II, 318.

56 Callahan, 65,90-91; Henry Winthrop Ballantine, "Title by Adverse Possession," **Harvard Law Review** 135 (1918): 151; William F. Walsh, "Title by Adverse Possession - II," **New York University Law Quarterly Review** 17 (1939): 72.

57 Walsh II, 73. Walsh's statement is meant to apply to England as well, but we have seen that demands on the possessor are more important in America.

itself is secondary. His opponents see a more important role for the positive conditions on the possession; Walsh's example is privity - connection between successive possessors allowing their tenure to be considered a single possession.[58] There is some evidence that the importance of these positive conditions has grown, increasing the burden of proof on the possessor, and to this extent the gap between American and Jewish law with respect to burden of proof is narrowing, as it undisputably is with regard to the required threshold.[59]

PURPOSE OF THE STATUTE

Many different goals have been adduced as the "purpose" of having an adverse possession rule. We have already mentioned the broad effects of such a rule, and chapter V will discuss these effects in detail.

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58 Typical examples of privity are seller/buyer or some family relation. But if one squatter vacates and another opportunistically enters, there is no privity; and Walsh asserts that virtually all decisions deny title to the possessor in such cases.

59 Netter et al. cite a 1980 ruling where the court states explicitly that it is shifting the traditional burden of proof: "Our ruling . . . shifts the burden of proof at trial. Under the doctrince of adverse possession, the burden is on the possessor to prove the elements of adverse possession." **O'Keefe v. Snyder**, N.J. 416 A.2d 862(1980),p.873, cited in Netter et al., 223. They also list eight states which have changed the length of the threshold; all but one lowered it, by an average of six years. Netter et al., 228.

However, most of the influential papers assert that the purpose of the statute is to "quiet titles",[60] perhaps following the language of the 1623 statute quoted above. AP is likewise referred to as a "statute of repose".[61] The quiet obtained is of an obvious nature, that the possessor is theoretically immune to legal action. Why this is a beneficial sort of quiet needs study, since "it is apparent that 'good' as well as 'bad' claims are barred."[62] Whose quiet are we seeking - "for the courts, for potential defendants, or for the public?"[63] The case has been made for all three.[64] The main idea is that landowners should be free from having to prove ownership after a long time in the land, and that buyers should be free from having to worry about arbitrarily distant links in the chain of title.

F. PRESCRIPTIVE EASEMENTS IN ENGLISH AND AMERICAN LAW

"We now have to deal . . . with prescription, which is arguably the most complex, antiquated and unsatisfactory branch of the law of easements and profits, and perhaps of the

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60 Ballantine "Title," 135; Walsh I, 534; Callahan, 86-88.
61 Walsh I, 536; Callahan, 86.
62 Callahan, 84-85.
63 Callahan, 86.
64 Merrill: courts, 1128; defendants, 1128,1131; public, 1129,1132.

law of property generally."[65] We will do so as briefly as possible, emphasizing the main differences between prescription and AP, and between prescription in JL and in AAL.

Easements are closely related to property rights in AAL, and so prescription is quite similar to AP. The enjoyment of the easement must be adverse, according to the formula of the Roman jurist Ulpian: **nec vi, nec clam, nec praecario** - neither by force, nor secretly, nor by permission.

An easement is specifically a right of use that does not challenge the owner's rights; "a right which would make it possible to oust the owner of land from the use and enjoyment . . . cannot be an easement."[66] Most commentators hold that this restriction does not exist in JL.[67]

INTENT

We have explained that a very fundamental difference exists between AP in JL and in AAL with respect to the question of claim of right. In JL, it is completely impossible

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65 Poole, 89.
66 Poole. 80.
67 See discussion in **Encyclopedia Talmudica**, s.v. "Hezkat tashmishim", vol. 14, p.374

to acquire by AP unless the possessor makes a claim of having acquired title from PO, and his claim is rebuttable. Whereas in English law, claim of right was never demanded; and even in American law, where a requirement of claim of right was written into many statutes, the law was never interpreted by judges to require that the possessor have a **bona fide** claim to have acquired title through voluntary transfer.

Conversely, we saw that many JL commentators rule that **prescriptive easements** may be granted without a claim of explicit acquisition, since easements can be acquired through tacit consent (above, end of section II).

Interestingly, in AAL the opposite "switch" is found. Unlike AP, prescriptive easements are granted on the assumption that a grant was once made, and this assumption is in principle rebuttable. Continued use constitutes conclusive **evidence** of valid acquisition in the past. "The earliest act of use proved, tends to prove a right then existing. . . . Such light evidence gains force by continued repetition, until at the end of twenty years it becomse, unexplained, conclusive evidence of right."[68]

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68 **Wallace** v. **Fletcher**, 30 N.H. 434 (1855), cited in Ballantine "Title," 143.

DURATION

With respect to duration also we find that the AP/prescription difference in AAL is opposite that of AL. In JL, the codifiers referred to rule that prescriptive easements can be acquired at once, compared to three years for AP. In AAL, prescription required at first a proof of continuous enjoyment "since time immemorial", i.e., since the accession of Richard I in 1189. While enjoyment for twenty years was considered to raise a presumption of enjoyment "since time immemorial", this presumption could be rebutted; and many easements could easily be shown not to have existed since 1189.[69]

In the eighteenth century, the 1189 requirement was modified to "the earliest date when the grant could have been made", and no less than twenty years.[70] In 1832 a flat twenty year threshold was instituted,[71] but this is still longer than the threshold for AP, which was lowered in 1874 in England to twelve years. In America also many states have longer periods for prescription than for AP.[72]

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69 Poole, 90.
70 Poole, 90.
71Poole, 90.
72 Examples: New York: AP 15 years, prescription 20 years (A. James Casner and W. Barton Leach, **Cases and Text on Property** (Boston: Little, Brown and Co., 1951): 1148; but cf. p. 1161). Michigan: AP 15 years, prescription 20 years (Casner and Leach 1167). AP thresholds are from Walsh I, 534.

IV. DETAILED SUMMARY OF THE REGULATION

We have now sketched the history, basic thrust, and main topics of discussion in the literature of AP in JL and AAL. However, more than a sketch is needed to perform an encompassing analysis of the differences between the two regulations in their economic aspects, and we must now give a detailed summary of the AP rules.

The format of the summary is that each rule begins with a condition of the JL AP, in most cases directly derived from the Talmud. Each point is accompanied by the appropriate parallel or contrast in AAL, where relevant.

(L1) A possessor, even without any evidence or claim, is not evicted except by a claimant who has specific evidence (not necessarily decisive) to back his claim to the property.[1]

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1 All of the major decisors conclude this: **Mishneh Torah**, Plaintiff and Defendant 11/1, Jacob ben Asher **Arba'ah ha-Turim** section **Hoshen Mishpat** 140/1 (henceforth cited as **Tur**), Isaac ben Jacob Alfasi, **Halakhot** tractate Bava Batra 15a (henceforth Alfasi). They bring as their source the view of Rabbi Yehoshua in the Mishna on page 15b of tractate K'tuvot, which is accepted in this form on page 17b there.

The opposite view is scarcely recorded in the literature. Menahem ben Solomon Meiri, **Bet ha-Behira** tractate Bava Batra (henceforth: "the Meiri"), commenting on the Mishna on page 41a brings as a minority view that "some great commentators" are of the opinion that if the current tenant makes no claim to ownership and the plaintiff makes a clear assertion of his ownership, even without proof, that we should award the land to the plaintiff. Mordecai ben Hillel, **Sefer ha-Mordekhai**, tractate Bava Batra (henceforth: "Mordecai") chapter 3, paragraph 535 records that one scholar (Rabeinu

This holds also for AAL. "A wrongful possessor of land or chattels is owner as against all the world except the true owner or one with a better title based on an earlier possession which he has not abandoned."[2]

(L2) The type of evidence demanded is testimony by valid witnesses that this particular estate is or has been **known** to be in the possession of the claimant or his family, or to any other person from whom he can trace the ownership with documentary evidence.[3]

Evidence of prior seisin is sufficient also in AAL to displace a squatter. The evidence demanded is the testimony of neighbors, so the requirement seems to be of the same character as in JL; compare the second quote from Walsh in (L5).

Yakar) was uncertain on this point, but that the point should be resolved according to the opinion listed here - that no one can be evicted except by someone who has evidence of ownership.

2 Walsh I, 536. See Ballantine "Title," 144 for an "important limitation" which does not however concern us.

3 There are different views of the exact nature of this known-ness. Meir Abulafia, **Yad Ramah**, tractate Bava Batra, chapter 3, section 38, a very early commentator, uses the criterion that "whenever anyone refers to this land, they refer to it in the name of so-and-so"; his main source is the story of D'vei Bar Sisin on Bava Batra page 30a. The expression "known" (**yadua**) appears in the **Yad Ramah**, in Alfasi 15a, and in most later commentators, but I am unable to find it in the Talmud.

(L3) The degree of proof that a claimant needs to establish that he is in fact a previous owner is fairly light. Apart from bringing testimony of his known-ness per (L2) he can establish himself as a previous owner vis-a-vis a later tenant by demonstrating his prior tenure in the evident capacity of ownership for as litle as one day![4] The key to the validity of previous-owner status seems to be more in its being unchallenged for whatever its length than in its length per se.[5] Of course, a short tenure is of no use against a **previous** known owner, so this leniency is not an invitation to fraud.

The same principle would seem to be implicit in the AAL idea that "Every title to land has its root in seisin."[6] Ballantine also explains that a title requires "evidence of possession by the grantor of the premises conveyed."[7] Walsh asserts that any possessor can sustain an action against any subsequent disseisor or trespasser.[8]

I have not found in the AAL sources exactly how much occupation constitutes seisin in this case. We mentioned above

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4That is, even one day's tenure makes him "known".
5 Bava Batra 41b, **Yad Ramah** chapter 3, paragraph 118.
6 Pollock and Maitland, **History of English Law**, 46, quoted in Ballantine, "Title", 137.
7 Ballantine, "Title", 136.
8 Walsh I, 538.

that in the case of forcible entry there is seisin after four days. Potter indicates that "occasional possession" did not suffice to act as seissor, but perhaps this is only in the case where there was another seissor with more fixed possession. It does seem that a relatively short period is sufficient.

(L4) A valid title deed from the last known owner constitutes incontrovertible proof of ownership as against claims subsequent to that owner's possession.[9]

Such a principle goes against the foundation of AP in AAL, which is that possession itself can grant title. A tortious entry subsequent to the legitimate conveyance may in the meantime have ripened into a "prescriptive title" through adverse possession. "The proof of a paper title sufficient to make out a **prima facie** right to possession of land may, therefore, be exceedingly difficult."[10]

(L5) In the absence of such a deed, impartial testimony that the tenant has made full use of the property according to local custom for three full consecutive years stands in its

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9 This is obvious from the case in Bava Batra, bottom of page 30b, in which the deed if valid is clearly sufficient.
10 Ballantine "Title," 136.

place. Such testimony invests the tenant's claim that he had been in possession of a deed of a particular description with full credibility.[11] This is the rule of three years' possession. Any possesion which falls short in duration or intensity fails to excuse the loss of the deed. (Alternatively, it excuses a failure to protest; see discussion of "decisive laches" above.)

Hence we can see that in one way a possession is actually superior to the deed for which it is a substitute, since it is equally valid against any plaintiff, unlike a bill of sale, which helps only if that particular seller proves to be the last known owner.

In AAL, proof of a sufficient possession suffices in general to actually invest title in the possessor, even in the presence of **proof** that his possession is tortious.

AAL also demands "full use": "actual and legal possession of land exists when an actual **possessio pedis** [literally "foothold" - substantial possession] is established with the degree of actual use and enjoyment of the parcel of land involved which the average owner would exercise over

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11 Bava Batra 41a indicates that the fear that one still needs a deed under such circumstances is unfounded.

similar property under like circumstances." "The actual use and enjoyment of the property as the average owner of similar property would use and enjoy it, so that people residing in the neighborhood would be justified in regarding the possessor as exercising the exclusive dominion and control incident to ownership, establishes adverse possession in the absence of evidence that his possession is under a licence or tenancy."[12]

(L6) If the claimant demonstrates that he made a formal protest in each three year period subsequent to the tenant's arrival, asserting his own ownership of the property and his intention of suing the specific tenant should he fail to evacuate, then no substitute for a deed is acceptable.[13]

The commentators use the expression that such a protest nullifies the legal presumption provided by AP[14]; subsequent to such a protest a claimant is required to keep his deed yet another three years to protect his claim.

All the legal sources indicate that the effect of AP in AAL is to bar a lawsuit after the possession has met the positive requirements for the statutory period. Intermediate

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12 Walsh I, 542.
13 Bava Batra, 39b.
14 For instance, Tosafot Bava Batra 28b, s.v. "**Ela me'ata.**"

protest which is not a legal action would accordingly be useless; it seems that the only effective "protest" would be an anti-protest which asserts that the land is being used with permission![15]

However, a good deal of folklore indicates that even in AAL absentee owners routinely make protests of precisely the character demanded by JL, with the intent of staving off AP claims. The usual form of these protests, according to my folk sources[16], is a letter alerting the possessor to the owner's rights and threatening legal action - which of course never materializes. Helmholz cites such a case in his article and observes that it did not nullify the AP, without

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15 This would work by nullifying the **adversity** of the possession by fiat, i.e., a declaration that the tortious possessor is granted permission to remain. Indeed, if the permission were for only a short time, it would seem that this device would defeat the AP claim by compromising the continuity of the AP, without conceding the mesne profits which are due of course only from a non-approved possessor. Yet I have never heard of such a device being suggested. Perhaps hostility does not mean lack of consent but lack of mutual agreement.

During the era of parallel actions in England there was "the doctrine of 'disseisin at election', by which the disseisee could choose whether or not to treat himself as disseised" (Potter, 504) by an illegitimate lessor or alternatively as deprived of rent by the lessee; if he elected the latter the statute of limitations did not run against him.

16 Many of my non-lawyer acquaintances who had heard of adverse possession explained that this was only because they had received such letters and consulted lawyers in their confusion.

explaining why it should have done so.[17] Walsh points out that some states have special shorter periods of limitation for possessions which are "peaceful", which suggests that belligerence on the part of the owner has at least some effect.[18]

(L7) Such a protest must be made under conditions which at least allow the news of its existence to reach the tenant.[19] Under normal circumstances it is considered axiomatic that such news will in fact reach the tenant within a reasonable period.[20]

The form of the protest is a declaration in front of two witnesses that the land held by the **specific** possessor belongs to the declarer, and that if the land is not evacuated when expected, the owner will sue the possessor.[21] Clearly

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17 R.H. Helmholz, "Adverse Possession and Subjective Intent," **Washington University Law Quarterly** 61 (1983): 348. Helmholz mentions that it demonstrates the bad faith of the possessor, though this need not be true; a rightful owner who receives such a protest is not bound to react to it. Such a letter **does** demonstrate bad faith in the case of a possessor who claims he thought all along that the land was his because no one told him otherwise, but admits that he had been mistaken - the usual case in boundary disputes.
18 Walsh I, 535.
19 Bava Batra, 39a.
20 Since the Mishna on Bava Batra 41a admits the excuse that the news might not carry only in cases of extraordinary isolation.
21 Bava Batra 39a.

this is not a very demanding form of protest, so it is reasonable that a failure to make such a claim will be considered culpable negiligence.

Of course protest is not an essential part of the AAL AP picture. However it is interesting to note that to the extent the above-mentioned letters of threat are parallel to protest in JL, proof of delivery is essential, hence the use of registered mail for such communications.[22]

(L8) If the claimant was incommunicado for part of the three year period, then the three years' possession does not provide the possessor with effective proof of ownership. The standard for being incommunicado is quite strict; the PO must have been in a place of virtually complete isolation from the region of the possession. It does not refer to the owner himself hiding in an isolated area.[23]

Two reasons for this exemption are put forward in the literature. One is that the owner cut off from normal

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22 Private communication from Franklin M. Fisher that the burden of proof is on the sender to prove that the communication is received in all such cases.

23 Bava Batra 30a, discussion of "**shuki barai.**" Exactly how much time an owner needs to be beyond news is an object of dispute; as is the location of the burden of proof that the prior owner was out of touch.

channels of communication has a credible claim that he never received news of the tenant's occupancy.[24] Another is that while one so cut off is able to find out the state of his property, the court attributes his lack of protest to his belief that in any case news of his protest would not have reached the tenant.[25]

The rule that circumstances preventing effective **protest** constitute a disability in JL find an exact parallel in the rule that circumstances preventing effective **legal action** constitute a disability in AAL. The disabilities in the 1623 statute (copied in many American statutes) are: infancy, insanity, coverture (being a married woman, which then restricted legal action), imprisonment, and being "beyond the seas".[26] The first three are identical in JL; while the last two are not **per se** disabilities in JL. The Mishna already explains that even a year's distance is not a disability.[27]

English law adds certain technical, procedural disabilities. For instance, a remainderman - one who is bequeathed fee simple (full ownership) immediately upon the

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24 Rashbam 30a, s.v. "**B'shukai.**"
25 Tosafot Bava Batra 38b, s.v. "**ain mahzikin.**"
26 Callahan, 75; Ballantine "Title," 145.
27 Bava Batra, 38a. Evidently this was the travel time from Palestine to Spain in the time of the Mishna.

death of a life tenant - is considered disabled during the lifetime of the tenant, since he has no cause of action, as his right of entry begins only at the death of the grantee. So the grantee's carelessness in allowing an adverse possession can not deprive the remainderman.

(L9) Publically known sale of a property constitutes a valid protest, and in fact the Talmud comments "There is no protest greater than this."[28] This is logical since there is no assertion of ownership more absolute than the assertion of the right of final disposal.[29]

According to some commentators, such a protest needs no renewal. Suppose that a normal protest needs renewal every three years because possessor P is justified in believing that seller PO's failure to **renew** his protest constitutes implicit recognition by PO that P can demonstrate his claim after all and admission that P is in fact the rightful owner. This excuses P ignoring his deed. Then in the case where PO sells to P', P is **not** justified in such a belief, since the purchaser P' unambigously believes **he** is the sole rightful owner, and can not be construed as conceding to P.[30]

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28 Bava Batra, 31a.
29 See Ames I, 25.
30 Rashbam Bava Batra 30b, s.v. "**v'hani mili;**" Rosh **Hilkhot ha-Rosh** tractate Bava Batra chapter 3, section 8.

Conversely, in Medieval England, it could fairly be said that "there is no protest less than this." A sale is not a lawsuit, and therefore can not in any case interfere with AP. But more to the point, such a sale would have no validity whatsoever, since seisin was a prerequisite to conveyance. [31]

Indeed, such a sale could promote acquisition of title by the adverse possessor. The purchaser may find out too late that he has no rights against the possessor, and then he must sue the seller, who can sue the possessor, and all the time the clock is running.

(L10) An evicted possessor must return to the victorious owner any profit he made on the land for which there is proof by valid testimony.[32]

The profit is net of expenses including imputed wage;[33] also it is paid back without interest.[34] And in the

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31 Callahan 47, 57. He explains that many states still have such a requirement, which no longer exists in England. It seems that such requirements have disappeared as a practical barrier to alienation.
32 Bava Batra 33b.
33 Since the squatter invested the effort which is responsible for the produce which is returned to the owner, he is an unauthorized workman according to the definition in tractate Bava Metzia page 101a. Such a workman is entitled to compensation according to either his own expenses (including opportunity cost of his labor) or market value of his services, whichever is less. This is an example of the general tendency in Jewish property law to rely on market measures of value whenever possible.
34 Even if waiting time were considered a cost, interest could not be imputed since interest payments between Jews are

absence of testimony or admission there is no payment at all. Furthermore, if a squatter denies any claim to ownership of the property he is believed in a claim that the produce was sold to him. (Since the output is moveable property, which is subject to a "negotiability rule"; see note 10 in previous chapter.) Hence a squatter even if caught and evicted may depart with some net benefit from his tenure.

In AAL also a recovering owner is able to sue for intermediate, or "mesne", profits.[35]

(L11) Possessors who have the presumptive permission of the owner are not able to bring evidence of AP. This is because their possession is **ipso facto** not adverse. For instance, family members living together can not bring evidence of AP against each other, nor can co-tenants or sharecroppers.[36]

The identical condition is valid in AAL, **mutatis mutandis**. These individuals can not acquire possession through AP, since their possession is not adverse; or alternatively, is not a possession. "The family or servants, the guests or

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strictly forbidden according to JL. See Deuteronomy chapter 23 verse 20.
35 Walsh I, 538.
36 Mishna, Bava Batra 42a.

lodgers of a householder, do not have possession."[37] "The law creates a presumption against the acquisition of title by AP by cotenants".[38]

(L12) It is impossible to acquire an AP against the sovereign (in Babylon, the court of the Jewish Exilarch) as the sovereign does not bother to protest, since he can just confiscate.[39]

This is also axiomatic in AAL. It is illegal for a state to permit AP against the federal government, and absent explicit intention, state law is presumed to preclude claims of AP against the state.[40] In isolated cases, there is AP against a state with a special long statute of limitations.[41]

The reason however is not quite the same. In AAL the exemption is due to the sovereign's rule as law-maker: "the state makes the rules and we don;t suppose it meant to make them in such a way as to lose by them".[42] In JL, it is due to the sovereign's power of confiscation. The Exilarch did not in

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37 Henry Winthrop Ballantine, "Claim of Title in Adverse Possession," **Yale Law Journal** 28 (1918): 220.
38 Helmholz, 353.
39 Bava Batra 36a, and explanation of the Rashbam there, s.v. "**v'lo machzkinan b'hu**".
40 Callahan, 74.
41 Callahan, 74.
42 Callahan, 74.

fact make the rules; the Rabbis did. But he did not have to legislate in order to seize property; see following rule (L13).

(L13) The sovereign or other wielder of force can not acquire by AP, since property owners are afraid to protest against them.[43] Therefore, owner's failure to protest is not negligent.

In AAL, not only can a violent possessor acquire through AP, but some views indicate that one of the reasons for AP is to protect just such a possessor[44].

(L14) The possession need not be by a single possessor, but is valid even if by a series of possessors so long as there is notorious evidence of a connection between their possessions - such as a valid deed or a family relation.[45](The joining of possessions to add up to the statutory period is known as "tacking", and the requisite connection is called "privity".)

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43 Bava Batra 36a, and explanation of the Rashbam there, s.v. "**lo mahzki ban**". See also Bava Batra 35b, Rashbam s.v. "**yisrael haba mahmat akum**".
44 See Merrill, 1131; Callahan, 36.
45 Bava Batra 29b, 41b for privity by deed; 42a for privity within family.

AAL recognizes tacking in these instances, and in addition tends to accept simple verbal transfer as valid privity,[46] something explicitly ruled out in JL.[47]

(L15) Idle periods such as fallow years may be part of "normal use", especially in agricultural land. It is the opinion of almost all JL commentators that these periods do **not** count toward the three year period, and amount to a **de facto** disability. The reason given is that these periods in fact work like a disability: they tend to remove notice of possession from the owner. So for instance in an area where fields were left fallow every other year, it would take five or six years to accumulate an AP sufficient to prove ownership.[48]

In AAL also normal interruptions do not constitute a break in continuity for the purposes of the statute, and in fact the requirements for continuity are rather more

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46 Ballantine "Title," 149; Walsh II, 71.
47 Bava Batra 29b.
48 **Tur** chapter 141 section 3 summarizes the most important views. Most commentators are quite explicit on this point, on which the Talmudic text is mute. Furthermore, all the standard commentators attribute this understanding to Maimonides' **Code** (i.e., **Mishneh Torah**). In fact, while the issue is not mentioned, it is distinctly possible to understand that these periods do count according to Maimonides, and elsewhere the **Code** does count idle periods considered disabilities by other codifiers.

lenient.[49] Furthermore, idle time does not detract from the running of the statute.

(L16) Although the adverse possessor must claim that he acquired the land from the prior owner, if he acquired it from a known intermediate possessor then that possessor is subject to a rebuttable legal presumption of having acquired valid title. If prior owner PO brings suit against adverse possessor for three years P who claims that he acquired from known intermediate possessor PO', then PO' is presumed to have acquired valid title, and only if PO can prove that PO' was not owner can he reclaim from P.[50]

AAL does not need such a rule. Even without any claim of valid acquisition through voluntary transaction, P has now acquired title through adverse possession.

It is an important topic of discussion in AAL if an adverse possessor's title is retroactive.[51] If so, then liabilities appurtenant to ownership occurring before the threshold is reached are his responsibility.

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49 Casner and Leach, 1164.
50 This is the rule of **ta'aninan l'lokeah**. Bava Batra 41b.
51 See Callahan, 58-59.

V. AP AS AN EFFICIENT MEANS OF RESOLVING TITLE DISPUTES

A. INTRODUCTION

Adverse possession originated as a rule used to resolve competing claims of ownership of land, between two persons each claiming to have a validly derived title. This section of the paper discusses and compares the different approaches in economics and legal literature suitable for analyzing the efficiency dimension of such a rule.

A **transfer rule** is precisely a rule for resolving competing ownership claims, and therefore one logical way of looking at AP is as a transfer rule. In this case the rule is a compound one. Evidence tending directly to prove legitimate acquisition of title - "derivation" evidence - is valid only for a certain period of time, after which the evidence constituted by possession is decisive.

In the legal literature, two main approaches to this aspect of AP can be discerned. One views AP as a **statute of limitations** (SOL), in which the plaintiff's right to bring

derivation evidence expires after a certain period. The second is the **negligence approach**, which views the victory of Prior Owner at first as resulting from the negligence of Possessor in maintaining suitable prove of derivation of title, and the subsequent favoring of Possessor as owing to the negligence of Prior Owner in failing to bring suit early enough.

The Law and Economics literature has described the efficiency consequences of statutes of limitations and liability consequent to negligence, and these can be applied, suitably modified, to AP.

Since the AP rule in this context is clearly a device for eliciting hidden information -- since the dishonest claimant in general knows that he has no title - the economics "signaling" or revelation game literature is clearly applicable. In particular, the AP game is parallel in many respects to the education signaling game of Spence. An early suit signals honesty, since it is in the interest of honest owners to bring suit early and of dishonest ones to delay suit until the evidence has become relatively inconclusive. The court picks an AP threshold which enables it to "hire" the maximum number of true owners.

AP possession has other ends besides that of selecting the claimant whose title was validly derived; some of these are quite important. These are discussed in a subsequent section.

B. TRANSFER RULE APPROACH

A "transfer rule" (TR) is a rule used by the court to determine cases of contested ownership. Jackson[1] gives as an example two extreme rules: a "**negotiability rule**" which identifies ownership with latest possession, and a "**derivation rule**" which conversely favors the earliest documented claim when a later claimant can not show that his title was legitimately derived from the earlier one. Jackson shows that it is in general efficient for courts to limit admissible evidence to that which is highly informative for its expense.

A statute of **adverse possession** is a transfer rule which specifies that a "derivation rule" is in force for disputes in which the possessor has been in possession for less than a certain time threshold, and a negotiatiability rule thenceforth. An equivalent description is that a

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1 Jackson, 3.

derivation rule is in force but that derivation evidence from before a specific time is inadmissible. This rule is efficient under certain reasonable conditions.

A simple model will illustrate the point. Buyer purchases lot from Seller with a written Deed, costless to write, and takes possession of the property. Suppose Buyer can exercise caution with his deed at cost C, guaranteeing that no person can successfully challenge its validity; and can supervise his property at cost S, guaranteeing that no intruder can enter. If only Deed (derivation evidence, proving the source of his title)is admissible evidence, then there is no reason for him to supervise the land; a potential intruder can never gain title, since he has no deed. If only Possession (negotiability evidence) is admissible, then he has no reason to keep his Deed, since Seller's deed can not threaten Buyer's possession.

Suppose **both** are admissible; in the case of a tie we may assume that the outcome is random. (This assumption seems reasonable under a "preponderance of evidence" standard. More convincing assumptions are found in the model following this section.) Then Buyer must both watch his deed and exercise caution, or else risk losing the property (which we will assume for now is more expensive).

It is obviously in the interest of the Buyer that only the less expensive of these two proofs be admissible in court. Furthermore, it is in the interest of Seller as well, since if Buyer chooses to watch Deed Seller can not in any case win against him, while if Buyer chooses to "risk it" then the chance of loss to Seller is reflected in the purchase price.

Since **C and S vary according to types of good,** it is optimal to vary the rule accordingly. For low-S, high-C goods, such as small personal items easy to supervise and difficult to identify uniquely on paper (henceforth "paperize"[2]) a negotiability rule is efficient, whereas for high-S low-C goods, such as land (which is easy to identify uniquely and expensive to supervise, especially as it is often leased[3]) a derivation rule is appropriate. This approximates the practice of the legal system.

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2 This is a slight modification of its usual meaning, where it applies mostly to making a paper title for **intangible** property.

3 Though this begs the question slightly, since one reason it is leased is because it can be easily identified and reclaimed.

It is important to note that a lessee is **not** legally a possessor, and lease does not make supervision difficult because of a threat from the lessee, but because the owner is not present to supervise, and agency problems limit the extent of supervision of the lessee.

C and S may also vary for a single good over time. For instance, the cost of proving the validity and uniqueness of a deed accumulates over time, as the chances grow that it is lost or that another (possibly invalid) title has somehow come into being and needs to be rebutted. Whereas the cost of maintaining and demonstrating possession declines over time; "possession" is not verified by simple inspection, but by testimony of neighbors and so on, and a prolonged possession requires time and expense to displace in public consciousness.[4]

It follows that it is optimal to fix some time threshold for which the derivation TR for land loses its optimality, and a negotiability rule becomes efficient. This is a **dynamic transfer rule,** that is, one that varies across time. In this particular instance, it is the familiar rule of adverse possession, which states that a prolonged unchallenged occupation of land is valid evidence of title even against an evidently legitimate but "expired" deed.

The claim regarding the variation in C and S over time needs a short explanation. Assuming that for a short

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4 Recall (from the previous note) that possession of lessee is legally possession of owner.

possession a contract rule is definitely optimal, as we examine longer possessions we must examine the cost of proving ownership in each subsequent marginal year.

Each additional year brings a decline in the efficacy of the original contract, since it is increasingly likely to be lost or supplanted. Whereas the cost of protecting the document remains roughly constant; and even to the extent that much of the cost of contracting is a fixed cost incurred at the time of signing, the amortization of this cost over a longer period can not dominate the effect of declining efficacy, since after a certain amount of time the contract is virtually certain to be useless.

However, supposing that the contract is valid for n years - guaranteeing that owner can maintain his possession (technically, his seisin) for this period - the cost of maintaining physical possession for year n+1 can not increase, since in our model it remains constant at S. Furthermore, as a matter of fact it should actually **decrease** steadily for the reason mentioned - namely, that "possession" as a legal concept is established by an instantaneous check of the premises but by the examination of the ongoing state of occupation and exploitation of the property. If such

occupation and exploitation have been quite prolonged, then a subsequent short occupation is not only too short to qualify as an "adverse possession", but very likely may not be deemed "possession" at all.

So the early years of possession defended by derivation proof constitute an investment in owner's recognition which subsequently allow him to protect this recognition at lower cost.

Following is a brief exposition of the idea of transfer rules. Afterwards, we discuss the usual approaches to the optimality of AP as a means for determining title disputes (it serves other purposes also), and show that they are equivalent to the TR approach. Finally, we present a simple two-period model comparing two different kinds of derivation evidence - contract and testimony of a public transfer ceremony ("livery of seisin"), and discuss the optimal threshold in each case.

C. EFFICIENT TRANSFER RULES - A BRIEF SUMMARY

The information that courts apply to decide cases of contested ownership is costly. To the extent that the costs of

acquiring this information is borne by the courts (and police etc.) themselves and not by the contestants, it is obviously efficient to limit admissible evidence of title to data which is relatively inexpensive to obtain and relatively inexpensive for owners and traders to correlate with ownership.

> For example, while it may be possible for police to determine the ownership of a car with some certainty by tracing the serial number on the engine block, it is much less expensive for all car owners to acquire license plates. So it is efficient that many kinds of police services are denied to vehicles without license plates.

Even to the extent that all information costs are borne by the contestants, information costs are not minimized by agreement among traders. This is because the content of the agreement is itself a piece of evidence costly to adduce.[5] This cost can not be internalized by traders. Therefore, it is in the interest of traders themselves that courts limit the set of admissible proofs of valid title.

> For example, suppose title registration is the most efficient form of proof of land ownership (as suggested by several researchers). Suppose that such registration is in general inferior to written title as a decisive piece of evidence of ownership (as is usually the case even where registration systems exist). It won't help for

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5 A most obvious example of this is the use of language. It would not serve anyone's interests to pass a law allowing parties to agree on alternative meanings for accepted terms, for instance, that all occurrences of the word "doilar" in the contract is to be understood as a reference to "yen".

Buyer and Seller to agree that Buyer will register the sale and that Seller will not bring his title as evidence against him; if the agreement is verbal it has no force, and if it is written, then it is probably no more efficient than a written title itself. It is in the interest of both Buyer and Seller for the court to prefer registration evidence.

"Externalities" of the legal system putting search costs on one of the two parties **should** be effectively internalized. For instance, costs incurred by seller which will help the case of buyer against third parties will raise the purchase price and so will be incurred wherever efficient.[6]

For example, suppose A sells to B who then sells to C; then C faces a legal challenge from A, who claims that B's title was invalid. Now C must defend B's title, whereas B is not automatically liable to C if C can not do so. But it does not follow that B does not have an incentive to register title, possess notoriously, etc. If these steps demonstrate his title more efficiently than C's chance of a subsequent expensive title search, then the increased value of the land to C will make it in B's interest to take these steps.

Possession is often inexpensive to correlate with ownership. The cost of such correlation is the restricted ability to lease and the cost of preventing unauthorized possession. Items easily transportable and assessable, as well

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6 An example would be notorious use by seller which tends to strengthen his claim to ownership against prior tenants; even though this use may be expensive, the buyer will pay a premium for it, since it protects the title from which his own title is derived; and this is true even if the seller is insulated from paying damages to the buyer in such a case.

as perishable items, do not involve big incentives to lease; items easily supervisable compared to their value do not have a high cost of preventing theft. For such items we might expect the court to rely on possession alone, in effect eliminating consideration of disputes over small personal items, for example. Furthermore, items with high cost of identifiability make any other title criterion unworkable.

For objects with relatively low cost of unique identification, **paper titles and recording systems** are feasible. The former, of course, retains the problem that possession of the deed itself needs to be correlated with ownership; but documents are inexpensive to protect and do not carry an incentive to lease.

Recording systems are particularly attractive to buyers because they make unambiguous ascertainment of seller's title inexpensive; only one owner can be registered, whereas it is possible that multiple individuals hold paper titles (unless the title system is itself connected to a recording system, as is common for instance with automobiles). They tend to be unpopular, however, possibly because they are not in the control of the owner of the property and a mistake, inexpensive for a functionary to avoid, is very expensive for

the owner; owners may therefore feel that inefficient amounts of effort are invested in the integrity of records.

Titles and records have an approximately fixed cost of correlating with ownership and so their efficiency rises with the value of the good. Supervision costs in general rise with the value of the good.

The high value and easy indentifiability of land, together with its high incentive to separate ownership and control (due to durability and fungeibility, among other things) make it an ideal candidate for title and recording systems. The low value, easy supervisibility and difficult identifiability of small personal items, as mentioned, lend these to a possession criterion.

If multiple criteria are admissible, for instance titles and possession both admissible evidence of ownership, then they must be ranked. Now, the information value of a written title declines with time, since the probability that a subsequent transfer occurred accumulates constantly; furthermore, its cost increases with time, since it must be continuously supervised. Therefore, the efficiency advantage of title over possession as a criterion of land ownership, for

instance, declines with time. It must be efficient, therefore, to limit the period during which title is the decisive criterion. This justifies adverse possession statutes, which grant title to possessor after a fixed period, on pure information-efficiency grounds.

Several papers in discussing the optimal kind of transfer rule mention the cost of different proofs "relative" to the value of the property.[7] Whereas in our analysis only the absolute cost of the different kind of proofs is relevant. Supposing that we have established a negotiability rule for chattels, the court should be no more interested in hearing the case of the collector who claims that the museum's Van Gogh was stolen from him than it is in hearing the case of the contractor who claims that the museum's ashtrays have not been paid for. How does the absolute value of the property influence the choice of optimal TR?

One obvious way is that valuable goods are **ipso facto** more expensive to supervise, since there is a greater incentive to steal them. Contract costs, on the other hand, are mostly of a fixed nature. So if value is large, C is likely to be a small fraction of value, but S will be

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7 See for example Jackson, 3, 27.

comparatively large. The result is that a contract rule is optimal because C is small compared to S.

Another source of influence is that C is largely a per-transaction cost, whereas S has a larger per-time element. Since the rents from a transaction are on the whole proportional to the value of the sale, even if contracting adds relatively little to the security of the purchase over and above S, it will pay if it is small relative to the value of the property.[8]

Another consideration which did not enter our analysis is that there are great costs to arbitrary transfers of ownership, since owners build "reliance interests" in their property. This implies a dead-weight loss in the property's involuntary transfer, which are greater for more valuable properties, whereas in our analysis the only cost was the cost of demonstrating ownership - C and S.

Suppose some exogenous factor - not related to C and S - can influence possession or contract holding. For instance there may be some small probability of an effectively unpreventable loss or transfer. This virtually guarantees that

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8 See Jackson, 27.

for the most expensive goods it is efficient to use a derivation rule in the broadest sense, examining any and all evidence bearing on the question of ownership.

Finally, it could be that the TR itself influences C and S. It is true that using a broad test of derivation is inexpensive and inefficient in most particular cases. But where the reward for "negligence" - in this case, stealing - is great enough, it may be worth it to occasionally invest in diminishing this reward by spending a great deal to prove tortious possession, in order to discourage stealing - that is, to reduce S.[9] This effect does not appear in our fixed-S model.[10]

This also explains the disproportionately great resources expended in resolving thefts in which violence is involved - the immense dead-weight loss involved in violent crime makes it necessary to expend resources even greater than the loss involved, which would be clearly inefficient in the limited framework of our analysis.

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9 This is carefully treated in Merrill, 1134.
10 In the context of the two-period model which follows, we would say that a rule calling for a broad test based on certain suspicious circumstances would raise I - the percentage chance of success within the narrow rule which induces intrusion.

D. APPROACHES TO AP IN THE LEGAL LITERATURE

In the legal sources AP is often referred to as a "statute of limitations", and we also saw the discussion of the idea behind the statute discussed in terms of the "laches" - that is, negligence - of the two petitioners. On the other hand, we have referred to AP as a particular kind of "transfer rule". What is the relationship of the descriptions found in the legal literature to the transfer rule point of view? And how do these three approaches differ in their relation to AP from their usual understandings?

1. AP AS A STATUE OF LIMITATIONS

Richard Posner mentions two justifications for having statutes of limitations: **error costs** and **uncertainty costs.** [11]

Delaying litigation imposes costs associated with the use of stale evidence. One such cost, error cost, is that the outcome of the case is more uncertain when evidence is old; in

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11 Posner, 3d ed., 554.

Posner's analysis[12] this tends to favor the defendant, so the cost is partially internalized by the plaintiff. But part of the cost is a randomness in the application of the law which reduces its effectiveness.

> For instance, suppose the cost to victim of an accident is one, and the accident rate is $(S\ C)^{-1}$, where S is investment by a firm in safety equipment and C is investment by potential victims in caution, and S and C both cost 1. Total social cost is $(S\ C)^{-1}+S+C$. Then it is socially efficient for the firm to invest 1 in S and for bystanders to invest 1 in C; total social cost equals 3. If the firm is liable for all accidents where bystanders were not negligent (that is, where they invested 1) then firm's cost is $S+S^{-1}$, which is minimized at 1 - the social optimum; bystanders also maximize by choosing C=1.
>
> Suppose there is an error rate of 50%, so the firm's cost is $S+(2\ S\ C)^{-1}$. Firm chooses $S=(2\ C)^{-½}$. Expected accident settlement to bystander $1/(2\ S\ C)$ is also $(2\ C)^{-½}$, which is the maximum bystander is willing to invest in caution if the negligence clause is binding; this leads to a solution where $C = S \approx .79$, and a total social cost of 3.17. (For this S, optimal C with these indemnity conditions is also .79, so that the negligence rule is weakly binding.) Therefore the social cost of a 50% error rate is 0.17, or about six percent of total accident costs.

However, this cost has already been incurred by the time the accident took place; in other words, the possibility of error was responsible for underinvestment in protection and was responsible for "part" of the accident. From the point of view of the petitioners this cost is "sunk", and so from the

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12 Posner, 2d ed., 431.

point of view of the legislature it is a cost borne by society.

Another cost[13] is that it is more expensive to bring and examine stale than fresh evidence; this cost is borne only partially by the plaintiff, partially by the defendant and partially by the court.

In addition, the very fact that plaintiff decides when to bring suit is expensive for the defendant; he needs to be ready to bring his case at any time. This is not specifically an argument for a SOL specifying a latest date for bringing suit, but it implies fixing a limited "window" during which suit could be brought.

Therefore, it is efficient to mandate that a case be brought before a certain time, before delay costs become too high, and to enable defendant to plan with greater certainty.

Now, let us see how this analysis applies to **the resolution of contested ownership via a rule of adverse possession** (that is, not considering third parties). We have mentioned above two different kinds of evidence regarding

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13 Not mentioned by Posner, to my knowledge.

transfer of ownership: testimony, as in the case of transfer by a public ceremony of "livery of seisin", and deed or other piece of evidence in the possession of the defendant (possessor).

In the case of testimonial evidence, we find that **the error cost consideration is doubly important**; an honest plaintiff bears the full cost of error, since any deviation is to his disadvantage, whereas a dishonest plaintiff **benefits** from error.

On the other hand, **uncertainty costs are rather less important** since we know exactly what evidence is relevant - testimony of livery of seisin (for example). This is not at all like an accident case where a very broad range of evidence bears on the likelihood that defendant was negligent - even testimony regarding the event, which unlike LOS was not staged, is of uncertain scope, and in addition evidence regarding defendant's general behavior is of relevance.

So the single main reason we want to have an SOL is to force a dishonest plaintiff to bring suit when he is least likely to be victorious.

In the case of evidence by contract, we find that **the uncertainty cost coincides with the error cost!** What does the defendant need to have ready if he is sued - his deed! Without a SOL he needs to keep it indefinitely, and that is expensive. What is the error cost of delay - the likelihood that a possessing owner has lost his deed! There is one reason to have a SOL, and that is to have suit brought before a deed holder incurs costs holding on to his documentation of sale.[14]

The reason that Posner's analysis seems poorly tailored to our case is we are dealing with a completely different situation. In accident cases, there need be no private information, and both sides may have the same prior estimation of what the facts are. There is some uncertainty as to what the **substantive** law says about these facts, the petitioners have divergent priors as to what the outcome is likely to be, and so we need to establish **procedural** rules to minimize the cost of "discovering" the true law. If the substantive law were quite unambiguous, there would be no real need for procedural streamlining, since all cases would be settled out of court.[15]

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14 This involves of course holding on to a piece of paper, which seems to be the main consideration in JL; but can also involve costs of demonstrating the validity of the document.
15 Posner, 2d ed., 436.

But in our case, everyone knows what the law says - the valid acquirer has the right to the property, and both petitioners know who that is! **The procedural rules constitute the substantive law! The law's mission here is to discover private information, and it does so through procedure.**

It is exactly the procedure - namely the SOL - which is designed to keep cases out of court by compelling dishonest plaintiffs to bring suit when a defendant can be sure of victory. But we do not want to make the threshold too short; after all, it is not too expensive to hold on to a proof for a few years, and it is costly for an owner to make sure that he can prove he is seisor. A new deed is less costly than possession as an indicator of private information, but for an old deed the situation is reversed.

This suggests that the proper framework for analyzing AP is the TR analysis; that framework is designed exactly to find the procedure which minimizes the costs of making public private ownership information. But the usual TR analysis is static; **AP is a dynamic transfer rule** specifying the acceptable way of proving ownership as a function of the length of possession.

Indeed, **a dynamic transfer rule does not have to be a SOL.** If the rule for an old possession is negotiability (proof by possession), then we have a **de facto** statute of limitations, because other proofs are by definition invalid against possession under such a rule, and so we have limited the time period during which proof can be brought. But this is really just a coincidence; in theory we could have a reverse situation where possession is the cheapest proof for a new possession and other proofs for an old one; then we could have an optimal "reverse statute of limitations" where we require derivation evidence only **after** a certain date![16]

In other words, **a statute of limitations is a special case of a dynamic transfer rule** where the final criterion is possession.

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16 An example which is not exact but is quite close: temporary titles. Possession of an automobile is an invalid proof of ownership, and if an auto possessor is checked by a police officer he faces penalties if he does not have a valid paper title. But if he can prove that he bought the car quite recently (my memory suggests thirty days), then less formal proofs are acceptable with respect to these penalties. So possession is valid for thirty days, but afterwards one needs a title!

AP WITHOUT PRIVATE INFORMATION

Strangely, in Posner's discussion of AP specifically,[17] he does not mention the revelation aspect of the rule at all! He mentions the strictly procedural justifications, distributive considerations which will be discussed later, and the discrepancy of titles and possession. Why does Posner neglect what is in our analysis the most important consideration?

The answer is simple. Even thought AP grew up, in JL and AAL alike, as a rule to guarantee that estates as a whole would end up in the hands of the owner, or at least (especially in the case of AAL) in the hands of someone definitely, today only a tiny minority of AP cases fit this mold; "most adverse possessions are mistakes caused by uncertainty over boundary lines."[18] This is indeed closely parallel to the accident framework; there is not necessarily any private information, and the evidence bearing on the correct application of the law is proabably quite extensive

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17 Posner, 3d ed., 71.
18 Posner, 3d ed., 71.

and expensive in relation to the value of the disputed property.[19]

In fact, the original boundary error was an "accident" in which one party mistakenly occupied land not his and imposed costs on his neighbor, not unlike an auto accident. Like an auto accident, we would be inclined to let the costs lie where they fall were there not a negligence problem, in this case aggravated by the fact that the party imposing costs reaps the benefits.

One difference between a boundary error and an accident is that very often boundary discrepancies are not discovered until long after they occur, so that a SOL imposes more costs on the plaintiff in AP than in the accident case. On the other hand, fixed uses tend to greatly increase the expense of relinquishing land as time passes, so that a SOL produces a greater saving for the defendant in AP.

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19 Of course, the volume of legislation does not reflect the true application of the law; the clearest laws will in theory never be litigated. So it is probably true that without AP there would be a greater number of disputes over whole estates, and a greater incidence of unjust outcomes. But there is likely a fairly close relationship between a laws applicability and its litigation.

It follows that it is probably much more common to have tort sanctioned by a statute of limitations for boundary encroachers than for negligent accident causers. This makes sense, since while accidents impose great costs on society, encroachers impose relatively little; there is no direct dead-weight loss, they are most likely to be unnoticed when they cost the least to the damagee, and the expense of avoiding these errors (by checking surverys) is in general very great both for the encroacher and the encroachee.

2. THE NEGLIGENCE APPROACH

The legal sources discuss the basis of awarding ownership to the possessor as lying in the "laches" of the plaintiff; whereas prior to the statutory threshold, the possessor suffers a "laches" of lack of documentary (or testimonial) evidence. We explained that "laches" refers to "culpable negligence". What is the economic meaning of the legal concept of negligence?

Posner[20] explains that negligence in the law is "summarized in the negligence formula of Judge Learned Hand."

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20 Posner, 2d ed., 148.

This rule holds (in its marginalist form and in Posner's terminology) that if a marginal expenditure B can reduce by P the probability of a loss of magnitude L, then failure to spend B constitutes culpable negligence under the law. Logically, we would add another condition - that the one suffering the loss can not reduce the probability by P for less than B.

This formulation is parallel to the transfer rule framework as presented by Jackson, who looks at transfer rules as they influence third parties to bilateral transfers.[21] Assume that the court can find out the true owner in any case at some cost, not in general borne by the owner himself. Suppose that entering a purchase into a registry costs R. A subsequent purchaser can check the registry at negligible cost, or do a title search at expense T > R. Such a verification prevents a loss to the purchaser equal to the entire value of the property, since if his seller is not owner neither is he. The true owner has imposed a cost on the Ultimate Acquirer equal to the search cost (or the expected loss, if this is less); his own expense would have been less,

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21 Jackson himself limits his discussion to third parties; see Jackson, 2. But the approach is of course equally valid with respect to the parties to a transaction, to the extent that the costs involved can not be internalized.

and therefore he has been "negligent" in failing to register. Therefore, we hold him liable as it were for damages to the purchaser, and we demand that he award the property to him as a "settlement".

Of course procedurally what happens is that the court refuses to accept evidence of ownership other than registry, therefore subsequent purchaser can rely on the files, and the "transfer" occurs quite automatically without either original owner or acquirer of "defective" title appearing in any court.

If R > T, then the acquirer who fails to do a title search is "negligent"; by acquiring the property fraudulently he has imposed a "loss" on the owner, which he must make good when the owner proves his own title. Again, procedurally we merely say that the property never left the owner's possession, and that the acquirer has been duped by the middleman into paying in full for a defective title. But the tort framework is perfectly valid for studying this question. So we see that **a negligence approach to third-party property disputes is also equivalent to the transfer rule approach.**

In the case of owner versus fraudulent claimant, the application is only slightly more involved. The comparison

will be more transparent if we adopt a few conventions; afterwards we will examine their appropriateness.

We will consider the that Prior Owner is definitely the "proper" owner of the property, and that the Possessor has "destroyed" this ownership in an "accident", the accident being that he is now possessor without proof of ownership, nor can PO prove that possessor is not owner. Now, PO sues possessor for damages, namely the value of the property, since it is impermissible to destroy someone's ownership.

If the cheapest way of proving ownership is for owner to retain constant possession, then the owner could have thus avoided the accident. Since he relinquished possession, he is "negligent" and therefore the damager is not responsible to reimburse him.

But if the cheapest way of proving ownership is for all buyers to maintain adequate records, then we say that the damager was negligent either by entering illegally, or even if he acquired legitimately, was culpably negligent in losing his proof of legitimate acquisition.

In the special case of AP, negligence of the Seller can also consist in his failure to bring action within a

specific time period, even though his original relinquising of control was not "negligent".

According to this convention, the "accident" is not that the possession was transferred specifically, but that it was transferred without proof. If the PO is true owner, he could have avoided the transfer entirely; if the possessor is owner, he could avoided the disappearance of evidence.

An exactly parallel case which **is** treated in AAL as a damages case is where B enters into A's stand of trees and cuts them for logs, claiming that he bought this right from A. A asserts that there was no agreement, and therefore that the trespass was tortious; his recovery, if any, is for damages.

One evident peculiarity is that **this approach considers stealing to constitute "negligence" commensurate with failing to protect against stealing**, whereas one would normally consider the former behavior far more blameworthy.

This is easier to understand if we view the legal system as a sort of insurance company providing "theft insurance". The authorities guarantee to make good owners' losses from theft under certain (extremely broad) conditions,

but can impose conditions for protecting property against theft (defined according to each properties decisive definition of ownership, that is, its TR). Failure to meet these conditions constitute negligence towards the insurer, just as lack of fire extinguishers is negligent in a fire insuree. In the case of TR's, both parties are insurees, and the "company" has established rules such that in general exactly one party is delinquent.[22]

We saw in section II that there are certain exceptional cases where neither or both parties may be negligent.[23] According to the negligence/damages parallel, it would not be inappropriate to have some kind of intermediate award in such cases; there are cases in torts where the damager pays only partial damages,[24] and we could similarly

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22 Of course we do not expect that in the case where neither party is negligent - for instance if possessor can show that he lost is deed despite exercising due care; or even where the legal system is itself negligent - for instance where the Land Registry Office is burned down; that the "insurer" will make good the loss to both parties. Likewise, in a case of double laches we do not expect the State to confiscate the property, though the doctrine of escheat sometimes had this result.

23 Neither negligent: Possessor lacks evidence after the threshold even though there was a protest, but he can prove that no protest reached him or that his evidence was lost not through his own negligence. Both negligent: the threshold has passed but we can show that possessor lacked evidence even within the statutory period.

24 For an example in JL see Babylonian Talmud tractate Bava Kama 15a; though a careful look at the passage makes it evident that an extension of the rule to other cases is procedurally improbable.

demand that the possessor pay some sum to the PO in such cases.

E. TYPES OF PROOF OF OWNERSHIP - A MATHEMATICAL MODEL

Now we will develop a simple two period model which will enable us to examine the question of optimal AP threshold.

In the above treatment, we have typically identified derivation evidence with written contract, which accords with our experience; and we have assumed that while it has high reliability, its value as evidence declines over time. In the Jewish law discussion of AP, for instance, it is assumed that it is unreasonable to expect an owner to produce his deed after as little as three years.[25]

However, in medieval England a different method of proving derivation of title was used. A solemn gathering was held in which there was conspicuous **livery of seisin** - some symbol of ownership, often a clod of earth, was ceremoniously transferred from Seller to Buyer.[26] If the latter's ownership would be challenged, he would find neighbors who witnessed the ceremony (which was evidently quite memorable) and ask them to testify.

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25 Bava Batra 29a.
26 See for example Potter, 505-508.

While such derivation evidence is not too reliable - after all, memories can fail and, more to the point, witnesses can be hired, it seems from the descriptions in the law texts that it was quite **durable.**

These considerations can be illustrated in the context of a simple two-period model. Buyer purchases from seller at the beginning of period 1. Suppose the output of a property is 1 at the end of each period, and that in order to obtain the output the buyer must "prove" his ownership; and we will examine the cost of various kinds of proof.

Let the **cost of supervising the land** be s. This is the cost of eliminating intruders, who may be able to claim the output. We assume $s < 1$, so that it always pays to supervise rather than abandon land, when supervision guarantees victory.

The **cost of intrusion** is i. We assume that $i > 1$ when supervision takes place, so intrusion never pays on a supervised lot. We assume for now that without supervision $i > 1/2$, so that a 50% chance of winning does not justify intrusion.

Let a **contract** cost c to write. It lasts one period and then decays at the rate of 1/2 per period. That is, if it exists at the end of one period there is only a 50% chance that it exists at the end of the following. A new contract renews, that is, replaces, an old one, so only one contract can be held at a given time.

Let the cost of **livery of seisin** be 1; it lasts forever (three periods) but has only a 50% chance of proving ownership in any period; in other words, it has low reliability but high durability. We may imagine that 1 includes both the cost of the ceremony at the beginning of period 1 and the cost of bringing testimony when it is needed. The proof is the testimony of the ceremony of livery of seisin.[27]

For simplicity we assume no discounting, and risk neutrality.

All "costs" to the seller are expressed in terms of loss of output from the full-output state; in other words, expressed "cost" + expected output ≡ 2.

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27 More generally this represents a system which allows a very broad class of evidence to be brought; the likelihood that some testimony creating a preponderance of evidence can be found does not decline as fast as the likelihood of being able to prove any given datum.

COST OF PROVING OWNERSHIP UNDER SIMPLE TRANSFER RULES

1. If we use a negotiability rule - only possession is valid proof of ownership - then the cost of obtaining the output is 2s. The only way to obtain output is to be sole possessor each period.

2. If we use a derivation rule with proof by contract, so that a contract is always decisive against possession no matter how long the possession, then the cost of obtaining output is 2c. A new contract must be written at the end of the first period to guarantee output at the end of the second; otherwise the land will go to the seller with probability 1/8. (That is, if seller's contract still exists - probability 1/4 - and buyer's has expired - probability 1/2.)

If no contract is bought in period 2, there is a 21/32 chance that no contract is current. So if $i,s < 21/32$, supervision will be necessary; cost is c+s+1/8. **Net cost is lesser of {2c,c+s+1/8}.**

3. If we use a pure derivation rule with proof by testimony, the **cost of obtaining the output is 1+1/2.** There is a 25%

chance of losing the output in each period, since if the previous owner brings proof and the current owner can not, the output goes to the prior owner.

An intruder wins only if neither testimony is forthcoming, probability 25%. By assumption this does not justify intrusion, since i > 1/4, and so no supervision is necessary.

COST OF PROVING OWNERSHIP UNDER COMPOUND TRANSFER RULE - ADVERSE POSSESSION

Limiting the time during which a contract is valid benefits the buyer as against the seller, whose contract expires, but hurts him against **intruders.**

The "benefit" against any future buyers does not enter into consideration, since it will be discounted from the purchase price.

For simplicity, we will call proofs **old** (two periods old), **new** (one period old), and **current** (current period). By our assumption, a current contract exists with probability 1,

a new one with probability 1/2, and an old one with probability 1/4. Buyer's contract is current at end of period 1 and new at end of period 2; seller's contract is old at end of period 2.

4. Suppose possession is valid against an old proof but not against a new one. This is one way of formulating a rule of adverse possession.[28] This is a two-period AP threshold, since a contract is valid when it is current and new.

Now, **cost of obtaining output under proof by contract is only c.** In the second period owner is free of intruders since they will not risk a 50% chance of losing (since by assumption i > 1/2), and free of the former owner, since even if his contract exists it is invalid against owner's new possession. To be precise, the **cost is the lesser of {1/2+2s,c}**, since with two periods of supervision without contract buyer protects against squatters but risks loss to seller in period 1.

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28 The rule can be expressed in terms of the length of current occupation, with provisions for joining adjacent occupations by "privity", or equivalently by the length of time non-possessory proof is admissible, perhaps with provisions for disqualifying possessor for "irregularity" in his possession, such as an improper transfer since the proof. Most modern statutes use the first formulation; but the earliest English statutes had reference only to the age of the prior owner's claim.

If 3/8 < i < 1/2, then there must be supervision in period 2 but not in period 1. Cost will be lesser of {1/2+2s,c+s}.

5. Under livery of seisin, cost of obtaining output under such an AP rule is 1+1/4, reflecting the 1/4 chance that prior owner claims in period 1. Again, intrusion doesn't pay because of the 50% chance that recent 1 is proven, and seller's 1 is invalid against current possession.

Now the points made above are quite clear. If s is quite small, as in the case of small personal items, then of course we have no incentive to invest in other proofs. With c relatively small, as in the case of a highly literate society, it is efficient to rely on contracts; an AP threshold will be efficient. If c is large relatively to 1, we will use "livery of seisin" - unreliable but enduring proofs.

LIMITATIONS ON ADMISSIBLE EVIDENCE

Suppose that both c and 1 are admissible proofs, and seller is in possession of both. We will consider a one-period

model, and let c decay immediately, so that even at the end of period 1 buyer has only a 50% chance of producing his contract.

6. **With contract alone,** buyer's chance of obtaining output is 11/16; if he loses his contract (probability 1/2) then prior owner has a 5/8 chance of producing either 1 (probability 1/2) or c (probability 1/4) and winning. **Total cost is c+5/16.**

7. With contract plus livery of seisin, buyer's chance of obtaining output is 27/32 - 1/4 that he loses contract and fails to prove 1, 5/8 that prior owner produces some proof. So if $1 < 5/32$, it is in buyer's interest to invest in livery of seisin. **Total cost is c+1+5/32.**

8. Now, if we make 1 inadmissible as proof of ownership, then buyer's chance of obtaining output at the end of first period is 3/4. Total cost is c+1/4, which is less than total-admissibility cost as long as $1 > 3/32$.

So we have proven that for $3/32 < 1 < 5/32$ **it is efficient for the court to rule evidence of livery of seisin inadmissible.** This ruling is in the interests of seller as well, since purchase price increases accordingly; and it is a

fortiori in his interests since he also is saved the investment in the ceremony.[29] The additional information provided by proof of livery of seisin is not worth its cost.

It is obvious that if s is below any of these costs then it is optimal for the court to ignore all evidence apart from possession.

OPTIMAL LENGTH OF AP THRESHOLD

Now we return to a two-period model and consider another AP rule: **Suppose possession is valid against a new proof but not against a current one.** This is a one-period AP threshold. Now buyer is completely free of worries from seller, but a single contract is no longer double effective against intruders. Assumptions about contract decay are now irrelevant, since even a one-period old contract is expired..

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29 Of course, even without court action it could be that a buyer will refrain from investing in d since this will increase the purchase price he will obtain from a subsequent buyer, who does not have to defend against this proof. But this depends on a multitude of circumstances, including how much it hurts him against his own seller, the cost of verifying a seller's claim that he has no livery of seisin, and the cost to the buyer of having a weak title in his own seller if he needs to defend against previous owners.

9. Under proof by contract, **cost is lesser of (2s,2c).** If i > 1/2 and c < 2s, then a long AP threshold is efficient; it costs only c. If c > 2s, then a short threshold is efficient, since it increases the protection provided by inexpensive supervision.

10. Under proof by testimony of livery, cost is now the lesser of (21,2s), since livery of seisin deters squatters. If l < s, l < 1/4, this represents a saving over the long threshold (see (5) above), since removing the threat from the seller outweighs the need for an extra ceremony; but if l > 1/4, the long threshold is optimal.

INTEREST RATE

A longer AP threshold increases the threat from seller and decreases that from intruders. Under proof by contract, the danger from the seller is greatest in the first period, so that a higher discount rate reduces the incentive for a long threshold.

(In the presence of discounting, we must make explicit timing assumptions. We assume that all protection costs - c,

1, s - are beginning-of-period, and output is end of period. For simplicity, we will also make i end of period.)

11. For instance, let us compare negotiability - cost 2s - to a one-period threshold where i > 1/2 - cost c. If c = 2s, the buyer is indifferent, but if there is a discount rate the cost of negotiability drops to s(2+r)/(1+r). So discounting favors the shorter threshold. The same result holds if we compare negotiability to a two-period threshold under these assumptions.

12. We can construct a similar example comparing a derivation rule to a two-period threshold. Under a derivation rule where one contract is bought intruder's chance in period 2 is 3/8. Let 3/8 < i < 1/2. Then under derivation rule cost is c+1/4, and under a long threshold cost is c+s, since the protection of intruder against seller encourages intrusion and necessitates supervision. If s = 1/4 then buyer is indifferent between the two rules. But if we introduce discounting then the derivation-rule cost declines to $c+1/[4(1+r)^2]$, whereas long-AP cost declines only to $c+1/[4(1+r)]$. Again, discounting favors a shorter threshold.

13. Now we will look at "livery of seisin". Suppose 1/4 < i 1/2; then under a derivation rule cost is 1+1/2, where

the 1/2 represents loss to seller. Under a long threshold the cost is 1+s+1/4, since now there is only a 1/2 chance for intruder to lose in period 2 and supervision is necessary. If s = 1/4, then buyer is indifferent between these options.

If we introduce a discount rate r, then the saving in terms of period-1 loss is the same. But the saving in period 2 is greater under the derivation rule, since the loss to seller is at end-of-period and is discounted more than the supervision investment.

In fact, **it is not true under proof by "livery of seisin" that the loss to seller tends to be earlier than that to intruders.** Since we have assumed that the evidence does not decay, both costs are evenly distributed across time. Therefore, there is no fundamental reason that discounting should influence the choice of optimal rule.

TWO-PERIOD ADVERSE POSSESSION MODEL

The above examples rely on special assumptions in order to illustrate various points of interest. Now we will present the contract model in greater generality. We want to examine the optimal option under each rule as a function of cost of protecting against intruders, that is, as i and s vary.

A dominated option is put in parentheses.

I. Zero threshold (negotiability): cost = 2s.

II. One-period threshold (no threat from seller):

	2-contract	1-contract	No contract
	2c	(c+s)	2s

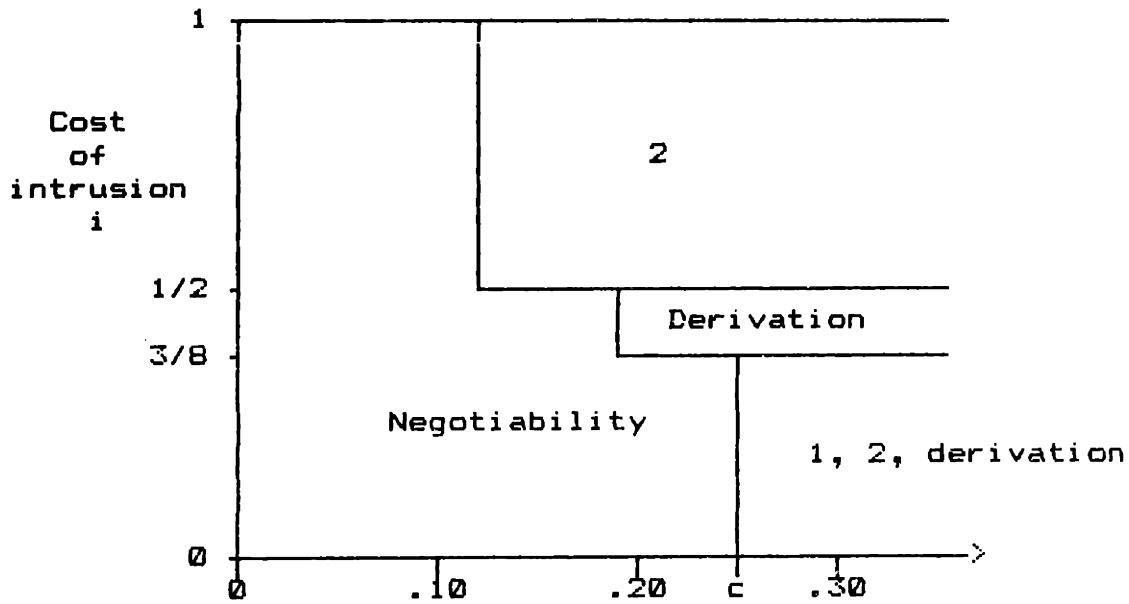
III. Two-period threshold

	2-contract	1-contract	No contract
$i = 0$	2c	c+s	$2s + \frac{1}{2}$
Threshold i to save s:	-	$i_2 = \frac{1}{2}$	$i_1 = \frac{1}{2}$
$i > \frac{1}{2}$	(2c)	c	$s + \frac{1}{2}$

IV. Derivation rule (three-period threshold):

	2-contract	1-contract	No contract
$i = 0$	2c	$c + s + \frac{1}{8}$	$2s + \frac{3}{4}$
Threshold i to save s:	-	$i_2 = \frac{3}{8}$	$i_1 = \frac{1}{2}, i_2 = \frac{3}{4}$
$i > \frac{3}{8}$	2c	$c + \frac{1}{8}$	$2s + \frac{3}{4}$
$i > \frac{1}{2}$	2c	$c + \frac{1}{8}$	$s + \frac{3}{4}$
$i > \frac{3}{4}$	2c	$c + \frac{1}{8}$	$\frac{3}{4}$

Here is an illustration of optimal threshold as a function of s, i. A zero threshold means a negotiability rule, a three threshold in our two-period model means a derivation rule.



It is obvious that for very low s a negotiability rule is optimal, since supervision costs are low buyer is not interested in instruments that help oust squatters, but is rather interested in protecting himself against seller. In this diagram, in the area marked 0, 1 is also optimal since it also locks out seller.

For low i, we must protect against intruders in each period, either through s or c; so as soon as s > c the optimal switches to buying two contracts, irrespective of the rule.

For somewhat higher i, buyer effectively keeps out intruders in period 2 with his period 1 contract only with the added threat that seller can also defeat the intruder. This outweighs the added supervision cost for high s, and is possible only under a derivation rule.

For high i, buyer alone can eliminate intruders with period 1 contract with a long threshold, and therefore is interested in eliminating seller in the last period, so a 2-period threshold is optimal.

TESTIMONY PROOF

I. Zero threshold (negotiability): cost = 2s.

II. One-period threshold (no threat from seller):

$i < 1/2$: 2s $i > 1/2$: lesser of {2s,2}

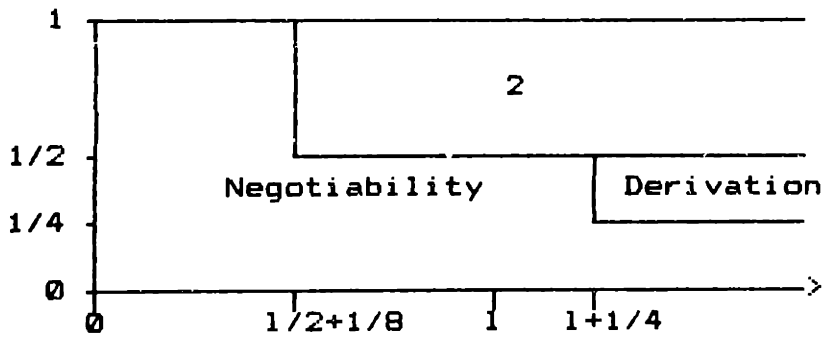
III. Two-period threshold

	1-ceremony	No ceremony
$i = 0$	$1+2s+\frac{1}{4}$	$2s+\frac{1}{2}$
Threshold i to save s:	$i_1 = \frac{1}{4}$, $i_2 = \frac{1}{2}$	-

IV. Derivation rule (three-period threshold):

	1-ceremony	No ceremony
$i = 0$	$1+2s+\frac{1}{2}$	2s+1
Threshold i to save s:	$i_1 = i_2 = \frac{1}{4}$	

Here is a diagram for "livery of seisin" for l > 1/4



Cost of supervision s

If l < 1/4, then the area of optimal two-period threshold disappears, and is replaced by an optimal one-period threshold starting at l.

As before, there is a narrow band of i where buyer actually wants the seller's rights to remain alive because this in itself deters intruders. For higher i, the optimal rule for highest s is a two-period threshold where it is cheaper in the first period to use l and risk loss to seller than it would be to lock out seller by a shorter threshold but at the same time lock himself out of the second period with his first-period l. If l is very low, this is not true and he prefers to pay for two l's in order to deter squatters, since this is cheaper than supervision for high s.

CONCLUSIONS OF MODEL

While we have not directly compared the optimal threshold for contract-proof and testimony-proof systems, which would require guessing parameters, the model does show that a contract system overall favors a shorter threshold, under our assumption that the reliability of documentary proof deteriorates more rapidly than that of testimonial proof.

Furthermore, the contract-proof system is more sensitive to the interest rate, and high interest rates normally decrease the optimal threshold.

High supervision costs, naturally, favor a long threshold in either system.

These results mesh very well with the facts presented in the background section. Jewish society in Babylonia was nearly universally literate,[30] implying a low cost of "paperization", represented in our model by c. Discount rates were very high, and as society was quite urbanized supervision

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30 See for instance Mishna tractate Bikurim, chapter 3 Mishna 7, which shows that even for farmers illiteracy was a significant disgrace.

costs were probably relatively low. All of these factors suggest relying on proof by contract, and a low optimal threshold.

In Medieval England, literacy was extremely low, and a very low population density suggests that supervision costs could have been quite high.[31] This tends to imply that a testimony rule would be relied on, and that the optimal threshold would be quite high. Over the course of the centuries "paperization" became increasingly common, and population densities grew; at the same time the statutory threshold dropped steadily.

> Many writers have looked condescendingly on the Medieval requirement for a tangible and public transfer ceremony, and the consequence distaste toward "secret conveyance",[32] viewing it as a manifestation of a "primitive mentality".[33] However, according to the TR approach, there is nothing primitive about this requirement at all; indeed, it is quite obviously efficient. If a particular transaction is permitted to be

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31 See Netter et al., 222.
32 See Potter, 507.
33 See for example Potter, 505, citing Pollock and Maitland **History of English Law** (2nd edition): 84.

> held secretly, then every owner must tremble at the thought that he may be asked to prove that no such transfer - prior or subsequent to his purchase - has made his title invalid. It is exactly the ability to inexpensively write contracts which enables inconspicuous transfers to be economically proven.

However, the "decay rate" of contracts seems to be comparatively low in modern England and America, and this suggests that even with a contract rule a longer threshold would be optimal. This may explain part of the gap between modern AAL and ancient JL thresholds.

Furthermore, structural considerations make it extremely difficult to eliminate entirely classes of admissible evidence, and to the extent that non-contract evidence is relied upon, the appropriate threshold for such evidence must be taken into account. This may help explain the gap that exists between newer and older states, the former in many cases having thresholds not much different from that of JL, whereas the latter are usually close to those of nineteenth-century England.

F. SIGNALING AND PARALLELS TO THE SPENCE EDUCATION MODEL

1. WITHIN FRAMEWORK OF PREVIOUS ANALYSIS

It is clear that AP is a device for reducing the cost of eliciting informative signals about ownership. It is possible that even without AP we have perfect revelation, because the necessary investments are made in documentation and protecting possession; then all possessors, or all deed-holders, would in fact be true owners. But the AP game involves reduced total cost of eliciting private information, counting of course the risk of loss as part of the cost.

The AP game is closely parallel to Spence's education model. In that model, high-ability agents have a low cost of acquiring education, which therefore has value as a signal for sorting agents according to ability. Education is an effective signal because "the costs of signaling are negatively correlated with productive capability."[34]

In land disputes, it is likewise true that **true owners have a low cost of bringing an early suit.** This way he not

34 Michael Spence, "Job Market Signalling," **Quarterly Journal of Economics** (August 1973): 358.

only regains the property early on, but also litigates when the evidence is most likely to favor him. Whereas Former Owners have an interest in delaying suit; the later the suit, the more likely the evidence is muddled and favors him. Therefore, **it is appropriate for the law to use an early suit as a signal to "hire" true owners.** This corresponds to a rule of AP.

Like Spence's model, there will in general be a continuum of AP thresholds which convey information; in a simple model, these may be perfectly informative. The efficient AP threshold is the one which minimizes the total cost - cost of accelerating suit plus risk of losing property - to owners.

Looked at this way, the AP game is not played between the plaintiff and the defendant, but rather it is a game between the plaintiff and other plaintiffs; each former owner is trying to signal that he is also a current owner. The role of the defendant - that is, Possessor - is to try to foil this signal, by maintaining documentary evidence which belies Prior Owner's implicit claim that his early suit signals "True Owner". Possessor's behavior in fact defines the schedule of cost-of-bringing-suit at a particular date.

For a given reaction of the Possessor, then, the parallel between AP and Spence's game is complete. In our case, the legislated rule influences this reaction, and this effect in turn bears on the optimal threshold. Spence does not model this feedback effect, but of course it is present in the market for education. If a monopsonistic employer were to fix a separating wage schedule (which is sometimes efficient in Spence's model), specifying that a Ph.D. guarantees a high wage, he must take into account that such a change in the labor market will in turn affect the cost of degrees.

The model in section E does not incorporate any cost to bringing an early suit; according to our current analysis, then, it should be axiomatic that the optimal rule is one in which suits must be brought right away; that is, a one-period AP threshold. Furthermore, it seems that suit against intruders in our model invariably is brought within one period. Why was a one-period threshold not shown to be optimal?

The answer is that we use an unusual convention in our model, in which the threshold is not according to the age of the possession, but according to the age of the evidence. As

we implied there, this is equivalent to establishing "privity" between the defendant and plaintiff! This seemingly unusual assumption was defended there by assuming that it is difficult to prove old possessions. This explanation was intended for simplicity of understanding rather than for accordance with true AP.

A more realistic explanation which also answers our question is to consider that leasing is invariably optimal, and to view supervision cost S as the cost of owner-occupation. This is a sensible assumption according to our explanation in section C that restrictions on lease are one of the main costs of correlating possession with ownership. It follows that the outcome described in the model as ignore in period I, supervise period II more realistically means lease period I, occupy (or switch tenants) period II in order to prevent a two-period occupation.[35]

So the cost of forcing owner to bring suit early in the occupation is the restriction of his ability to lease for more than one period; forgoing lease costs S, which now

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35 Even though a lessee is normally disqualified from acquiring through AP, his presence is still a threat since he can transfer the property to a third party who is not disqualified, and hence requires expensive monitoring.

represents the cost of bringing an early suit even for an honest absentee owner.

2. MODEL WITH SEARCH COSTS

One way we can make our model really quite closely parallel to Spence's is to introduce a cost to bringing suit early. The net cost will be less for Absentee Owner (AO) than for Prior Owner (PO), and so suit time will be an informative signal.

The reason that AO has an expense to bringing suit early can be attributed to search or monitoring costs. The fact that an AO must exert himself to inquire about the state of his property in order to bring legal action is mentioned in the early Jewish sources.[36]

In order to further augment the similarity to Spence and enable a continuum of possible solutions, we will move to a simple continuous-time model without discounting.

Time runs from 0 to 1; the value of the land at the end of the period is 1. At time 0 AO buys from PO with a contract, and immediately leaves the property in the hands of squatter S (who may more intuitively be viewed as lessee, or

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36 Tosafot tractate Bava Batra 38a, s.v. "**mehaa shelo b'panav**, Ramban tractate Bava Batra 28a, s.v. "**mishor hamuad**".

sharecropper, as explained above).

Watching the deed involves instantaneous cost c, supervision instantaneous cost s, as before. If we require contract evidence until time t and supervision thenceforth, then the cost to AO of protecting his property is c t + s(1 - t). Choice of TR means choosing a t. It is obvious that it will be optimal to have either t = 0 or t = 1 depending on whether c > s or the opposite. These terms correspond exactly to their use in the two-period model.

Now we introduce a **cost of listening for news.** In order to get news of his squatter within time t, AO must invest n(1/t - 1). Therefore getting news instantaneously - so as to bring suit at t = 0 - is impossible; getting news by the end of the period is costless.

Of course PO knows exactly who is on his property, and it is costless for him to protest immediately, but it is also useless, since he knows that AO still has his contract.

Now, if AO meets all the conditions of caution - contract, supervision, and listening - he is certain to keep the land; otherwise he is certain to lose it either to

squatter (if he failed to supervise or to listen for news enabling suit) or to PO (if he failed to keep contract until t, since it is costless for PO to bring suit then). The cost of this endeavor is: $E = c\ t + s(1 - t) + n(1/t - 1)$, and this expenditure will be worthwhile as long as $E \leq 1$. Therefore, we have the following condition for an informative signal:

(a) $c\ t + s(1 - t) + n(1/t - 1) \leq 1$ implying:

(b) $(c - s)t - (1 + n - s) + n/t \leq 0$

Any t in this range is an effective AP rule in that it guarantees that property remains in the hands of its true owner. The main difference between this and Spence's game, as mentioned before, is that the true owner's behavior is not only shaped by his own direct cost of early suit, but also through contract supervision determines what PO's cost/benefit of early suit will be.

The optimal t is solved for by differentiating (a), giving the FOC:

$$(c)\quad c - s - n/t^2 = 0$$

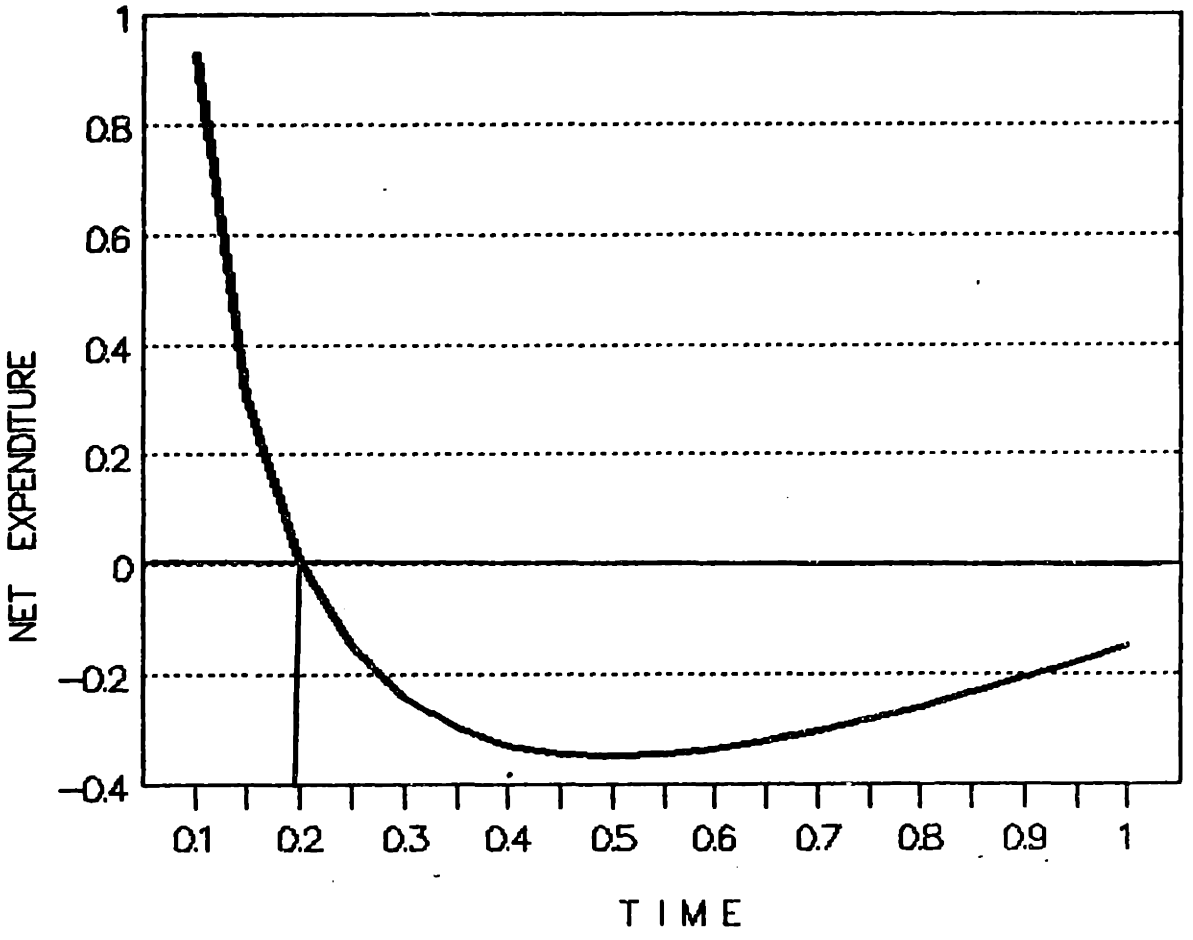
where the second-order condition: $2n/t^3 > 0$, is obviously satisified; implying that optimal t is:

$$(d)\quad t^* = \left(\frac{n}{c - s}\right)^{\frac{1}{2}}$$

Obviously, we will have an interior solution only as long as $c > s$; if $c < s$ then we will of course set $t = 1$, no listening costs are incurred and the deed is watched at cost c until the end of the game.

The solution is comletely intuitive; high cost of listening requires giving a longer time to acquire news, thus economizing on listening costs; high supervision cost having the same effect. Whereas high cost of watching a contract implies a short threshold t^*.

Here is a picture of net expenditure E-1 as a function of t for c=0.8, s=0.05, n=3/16.



We see that the optimal t is $t^* = 0.5$, and that any t from 0.19 to 1.00 is an "effective" t which guarantees that property remains in the hands of its proper owner. It is also obvious that protecting property is very expensive, since net

gain to owner at optimal t is only about 11% of the total value of the property.

6. PRESCRIPTIVE EASEMENTS

While we have suggested some procedural and environmental explanations for the difference in AP threshold between JL and AAL, to explain the difference in the amount of time to acquire and easement by prescription - in JL, immediately; and in AAL, decades - seems far more daunting.

But actually, the explanation is quite simple. In section II we explained optimal AP threshold as the "crossing point" of two "laches curves". The absentee owner's curve is the negligence of failing to protest by a certain date, which is very low for a short period but grows with time as his opportunity to hear news and respond increase. The possessing owner's curve is the negligence of losing his evidence, which is very high right after the transaction but declines after many years. These curves have sufficient slope to determine an optimal threshold with reasonable precision.

But in the case of prescriptive easements, the "prior owner" - that is, the owner of the servient tenement - does not have to wait for news; the "adverse possession" occurs on property which he concurrently occupies. Whereas the value of easements is typically much lower than for real estate, so

that it may not be efficient in general to write a deed at all; so the laches of the adverse enjoyer is not great even immediately after a transaction. This shows that demanding immediate reaction from the owner of the servient tenement, as in JL, is efficient.

On the other hand, the "adverse use" use does not in any way deprive the owner of the enjoyment of his property, and indeed in AAL such a use can not exist as an easement, as explained in section III. So there is no **exogenous** reason that the owner should be deemed negligent in failing to protest; there is no pressing reason for him to be insistent. Thus the laches is determined only by the rule, in other words by convention; the owner becomes insistent the moment the enjoyment is in danger of becoming recognized as a legal fact instead of as a simple favor; and a long threshold is also an effective convention.

VI. OTHER PURPOSES OF AP

Up until now we have been concerned with AP as a means for determining which of the two claimants - prior owner or current possessor - is true owner of the property in dispute. To the extent that the rule is effective in doing so, it is clear that the appropriate remedy is to grant title to the possessor after the threshold is passed.[1]

Now we will be concerned with other purposes of the statute, which in AAL are of great importance, and perhaps of primary importance.[2] While all of these goals require rewarding possession, it is no longer obvious that the best remedy is to automatically grant free title to the possessor. Indeed, very important recent work suggests that the use of the ancient form of AP to achieve these other goals may be

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1 Although we suggested certain borderline cases where it would not be illogical to have an intermediate award.

2 Indeed, so far has the legal discussion of AP drifted from the idea of protecting proof-less true owners that Callahan asserts that the recognition of possession **per se** - the **sine qua non** of this protection - creates such a mess in the rest of the law that the owner-protecting purpose of adverse possession should give way. "The idea that we do it [protect pure possession] in order to protect real owners by relieving them of the necessity of proving their titles may have more to it, but the loss of that advantage would be a small price for relieving the rest of the law." Callahan, 40.

rather a procedural artifact rather than an **a priori** legal desideratum.

In particular, Thomas Merrill in a 1985 paper[3] has drawn attention to an unprecedented 1984 ruling of a court of appeal in California. The court, while granting the defendant's claim of having acquired a prescriptive easement, ordered him to pay the owner of the servient tenement the fair market value of the easement. This is called **condemning an easement** - in other words, indemnifying its grantor.

Merrill makes a strong case for the efficiency of such a remedy specific cases, and his reasons will be reproduced here in his context and others. This remedy was not procedurally conceived of until the 1984 decision, and indeed was overturned by the California Supreme Court for procedural, structural reasons; but it is the **ideal** solution for many situations for which AP is a rather **unsatisfactory** solution.

In fact, **all** of the goals discussed here are generally furthered by AP in a rather roundabout way; therefore, in this section, concurrently with discussing how AP **does** promote

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3 Thomas W. Merrill, "Property Rules, Liability Rules, and Adverse Possession," **Northwestern University Law Review** 79 (1985): 1121-22.

other goals, we will suggest ways in which it **could** promote them more efficiently. The discussion has in mind primarily modern American law.

A. TRANSFER

Several commentators have suggested that transferring ownership from non-exploiters to exploiters may be a purpose of AP, at least as it existed in ancient Rome.[4] If we are interested in making inter-personal utility comparisons, the validity of such a policy is easy to defend, since the absentee owner, who has not made even a minimal investment in protecting his rights to the property, does not seem to expect much utility from it.

However, without using such comparisons, which are normally shunned as a basis for confiscation, such a policy is justified mainly if there exist significant **external** benefits to occupying the land.

Indeed, the most important modern example of such "adverse possession", homesteading, was obviously introduced

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4 **Encyclopedia Judaica**, 1517; Hirsch, 30, 36.

because of the presence of such externalities. The Federal government could not have received a high price for selling plots of Western land in the late nineteenth century because the land was deserted. The value of land stems exactly from the presence of many permanent settlers. Furthermore, there were national security benefits to settling the western frontier. Therefore, acquisition of lands was efficiently made dependent on long-term possession.

Recently, some cities have introduced an updated version known as "urban homesteading" where apartments in abandoned buildings in run-down neighborhoods - typically repossessed by the city for tax arrears - are offered for nominal sums on the condition that the residents restore the apartments and reside in them for a period of years. Again, the decline of the neighborhood is due to the lack of residents, demonstrating an important external benefit to occupation.

Of course, supposing the owner is not the state, for this purpose there is no reason to limit granting the property to the adverse possessor to the case where the owner sleeps on his rights; any time the owner does not actively develop the property it is appropriate to fine him, and to reward an individual who develops the property.

It seems that a more direct means of internalizing this externality would be to fine the owner a fixed amount for every year he fails to develop the property, and to pay a fixed stipend to anyone who in fact develops.

But this solution ignores the fact that the development of property typically involves the investment of very large sums, whose enjoyment is amortized over many years. AP encourages occupation with investment, since it carries with it a significant chance of gaining ownership.

Another way of achieving this would be to compel the absentee owner to pay some fraction of all fixed investment made by the squatter in his land. A comparable rule exists in JL.[5]

B. RELIANCE INTERESTS

This is used in the literature in two distinct senses, which will be discussed here separately. The first is the

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5 The rule of **yored shelo birshut**, the unauthorized workman, who receives the value of objective improvements. Tractate Bava Metzia 101a.

reliance of the **possessor**, who comes to rely on his possession, economically and psychologically, to an increasing degree as time goes on, and it becomes progressively more expensive from his point of view to oust him. The second is the reliance of **third parties** on the ownership of the current possessor, which it is desirable should grow with time so as not to involve these parties in an expensive search for old titles to the property.

In terms of the hierarchy of types of economic efficiency established in the introduction, all reliance interests are defended because of **enforcement costs**, the fourth rung on the ladder. We definitely want to protect the possessor even if we are sure he is not owner, but the state does not have any particular interest that the possessor should have title. It is just that the expense of returning the property to the possession of the owner grows over time with the increasing reliance of the possessor or third parties, and after a certain period has passed it is inefficient to enforce owner's title.

POSSESSOR RELIANCE INTERESTS

Merrill mentions three kinds of possessor reliance interests. The first "invokes the interest in 'preserving the

peace.' After a sufficient period of time has elapsed, so the argument goes, the AP's attachment to the property will be so strong that any attempt by the TO [true owner] to reassert dominion may lead to violence."[6]

The second "posits that the adverse possessor may have developed an attachment to the property which is critical to his personal identity. As Holmes colorfully put it, '[t]he true explanation of title by prescription seems to me to be that man, like a tree in the cleft of a rock, gradually shapes his roots to his surroundings, and when the roots have grown to a certain size, can't be displaced without cutting at his life.'"[7]

The third kind of reliance is purely economic. The adverse possessor may have made improvements in the property on the assumption that he would be able to remain in it. "[T]he value of the addition becomes a quasi-rent from the perspective of the TO [true owner]."[8]

The reliance arguments are especially convincing in the case where the adverse possession was mistaken - the most

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6 Merrill, 1131.
7 Merrill, 1131; citing R. Perry, **The Thought and Character of William James** 461-62 (1974).
8 Merrill, 1131.

common case today - since they are relatively uninfluenced by the opposite incentive of punishing wrongdoers.

It is clear that AP is a very imperfect solution to the reliance interest problem. The fact is that **conceding the reliance interests of the adverse possessor does not conflict with protecting the true owner's interest** in the property. The possessor should keep the property and pay the owner the fair market value, which is clear of "reliance value". Indeed very often the fair market value will be less than the true valuation of the owner, due to the owner's own reliance interests, and this even further points out the inadequacy of AP, which recompenses the possessor by even more than the extent of his own developed interest.

This indemnification is precisely the solution suggested by the California court of appeals. Since, as we have mentioned many times in this paper, the majority of AP cases today are boundary errors[9] which justify AP on the basis of reliance interests, it seems fair to hope and recommend that such recompense becomes the norm in AP cases.

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9 Posner, 3d ed., 71.

THIRD PARTY RELIANCE INTERESTS

Merrill explains that there is another class of reliance interests: "there may be third parties who also have an interest in the assignment of entitlement, i.e., vendors, creditors, contractors, tenants, subsequent purchasers of all or part of the property for value. . . it is simply not feasible to expect every interested third party to perform a title search before extending credit to, providing services for, or purchasing an interest from someone who appears to be a TO."[10]

Granting clear title to the possessor because of these interests is frankly ridiculous. At the very most, these parties should be able to collect from the value of the property what they cannot collect from other property of the lender. Merrill concedes that this reason can only be used to "tip the scales" in favor of AP together with other, stronger reasons.

The one seeming exception is that of subsequent purchasers, who have an interest in acquiring this land particularly. JL has a very simple solution to this problem:

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10 Merrill, 1132.

the requirement that the adverse possessor have a claim to have acquired valid title holds only with respect to one who assumed possession from the PO. A possessor who acquired title - so he assumed - from an intermediate possessor creates a presumption in that possessor of having been owner.[11]

Likewise, we could limit the application of AP to the case when the possessor acquired from someone other than the plaintiff. If the justification for AP is the reliance interests of third parties, it is only logical that the benefit of the statute should be reserved to them exclusively.

MAKING A MARKET

Another reason is given by Merrill for demanding that the owner "periodically . . . assert his right to exclude others. . . When the TO is required to assert his right to exclude, therefore, he is in effect being asked to 'flush out' offers to purchase his property, to make a market in the land"[12] He adds in a note that "[t]he Supreme Court has indicated that this is a legitimate state objective."

11This is the rule of **ta'aninan l'lokeach**; Bava Batra 41b.
12 Merrill, 1130.

The straightforward solution to this problem is not to reward tortious entry and possession with clear title, but to allow prospective buyers to file for the right to enter, which will be granted if the owner does not assert his rights. The problematic nature of a law specifically designed to reward wrong-doers is fairly clear.

CONCLUSION

AP was originally conceived as a means for protecting valid possessory titles. As the state of preservation of evidence and the efficacy of enforcement advanced, it began to serve other purposes, mainly protecting reliance interests. But AP protects these interests inefficiently; indemnification of the true owner is called for. Additional justifications for AP are also in general more efficiently achieved by other, simple, measures, or by restriced applications of AP itself.

VII. REQUIREMENTS ON THE CHARACTER OF POSSESSION

Until now, we have studies the various aspects of the fact that possession must persist for a certain **duration** before possessor is granted title through AP. However, both JL and AAL require in addition that possession be **normal** and **continuous.** This section discusses why this requirement contributes to distinguishing between possessing owners and mere squatters.

A.NORMAL USE

One prerequisite of a valid AP is "normal" usage of property. If the level or type of usage differs from the way owners of such a property normally make use of it, then the possession is disqualified. In the language of Levy in Bava Batra and Rav Nachman in tractate Eiruvin, it is impossible to claim land on the basis of use if "you did not take hold in the usual way."[1] Walsh explains: "The actual use and enjoyment

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1 Bava Batra 54a, Babylonian Talmud tractate Eiruvin 25a. The Aramaic expression is **lo achzakt k'd'achz'ki inshi.** The context is not that of AP, but a similar kind of title by possession. The commentators use the expression in regard to AP.

of the property as the average owner of similar property would use and enjoy it, so that people residing in the neighborhood would be justified in regarding the possessor as exercising the exlusive dominion and control incident to ownership, establishes adverse possession . . ."[2]

Numerous archetypical examples are listed in the Talmud. For instance, if a field of a particular type is normally used for growing barley, then growing hay on such a field is an invalid AP. If a field is normally plowed before sowing, then sowing without plowing is an invalid AP.[3]

If abnormal usage signals lack of ownership, then **a non-owner must have differing incentives which lead him to use the land in an "abnormal" way.** (Or from the standpoint of selection, an agent with an inclination to abnormal use must have incentives which lead him to squat rather than buy.) There are three reasons why this would be true.

1. A usage which is **discreet** and less likely to attract the attention of the owner is attractive for an interloper, since it provides more time before detection and hence more improper

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2 ". . .in the absence of evidence that his possession is under a licence or tenancy." Walsh I, 542.
3 Bava Batra 36a.

gains; whereas an owner has no fear of detection since he can prove his claim, and in any case can not gain by discretion since his seller knows he is there.

Merrill writes that all the positive requirements of AP are designed to provide notice to the owner; that is, their absence is suspicious because discreet. "[T]he common law has adopted a series of relatively objective criteria than single out forms of behavior by which AP's [adverse possessors] are likely to provide notice to the TO's [true owners] and the world at large."[4]

2. A usage whose gains are "**front-loaded**" - that is, return on investment concentrated in the near future - is attractive for an agent whose tenure is of uncertain duration and who can not recoup the value of investment through sale - i.e., a squatter.

The Medieval JL scholar Meiri makes explicit reference to this reason. He says that a possessor who harvests grain early as hay makes use "as one who is fleeing"[5]

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4 Merrill, 1142.
5 "**K'boreah.**" Meiri, tractate Bava Batra 36a, s.v. "**shahat**".

3. A usage which requires **low human capital** signals a type which is correlated with squatting. Typical "correct" use requires a certain amount of human capital. The cost of buying a field is the same for a high-ability or a low-ability agent; but the risk of losing one is of course more meaningful for someone who can get more output. So given the choice of buying or squatting, the agent with an inclination towards normal use - i.e., the requisite human capital - is more likely to buy. Therefore abnormal use signals a low-human-capital type which is correlated with squatting.

Disqualifications mentioned in the Talmud definitely fall into these categories. Among the disqualified usages which are "discreet," that is, less likely to come to the attention of the owner, are: switching off use between different individuals;[6] using the land only occassionally;[7] (this is actually a problem with continuity, which is dealt with in the next section); and using a neglected area of a property, beyond the fence.[8]

Disqualified usages which are "front-loaded" include: harvesting a grain crop early to use as hay [9]; sowing without

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6 Bava Batra 29b.
7 Bava Batra 29a-29b.
8 Bava Batra 36a.
9Bava Batra 36a.

plowing;[10] this is front-loaded in the sense of having low early investment, so that if one is evicted before harvest the loss is less; and cutting down a fruit tree to use as wood [11]

I am not sure of the reason for the JL requirement that there be net profit from the property[12], but it seems to me that is connected to the third reason. Having a very low return is an obvious proxy for low human capital.

There are two possible paths - direct and indirect - through which these squatter-signalling uses could invalidate an adverse possession.

The direct path is for the court to recognize uses which signal squatter, and disqualify them since the duration of possession in these cases does **not** signal owner, since it is contradicted by the character of possession.

Alternatively, the entire process could work through "known-ness." At the end of section II we described a model in which the AP threshold becomes a legal norm without legislation: early protest is optimal for absentee owners

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10Bava Batra 36a.
11 According to Tosafot Bava Batra 33b s.v. "**eizil;**" a similar though not identical legal presumption is in question.
12Bava Batra 36a.

because of an **exogenous** consideration, namely, loss of recognition by neighbors. Late protest is negligent **de facto**, even if not **de jure**. Therefore, it becomes a positive signal of dishonesty.

This signal is not dependent on what behaviors signal squatter in reality, but rather on what behaviors signal squatter in the eyes of the neighbors who will be called upon to testify that the absentee owner is known to them as owner of the property. To the extent that the heuristics of neighbors differ from those of the court, these two paths will disqualify different sets of uses.

Perhaps the latter path is suggested by the citation from Walsh above, which explains that we demand usage such that "**people residing in the neighborhood** would be justified in regarding the possessor as exercising the exlusive dominion and control incident to ownership."[13] (Emphasis mine.)

Like the three-year rule, the normal-use rule is defined by some threshold of normalcy above which the court decides the balance of evidence in a standoff is in favor of the tenant. The "discretion" threshold also has in common with

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13Walsh I, 542.

the length threshold that it is related to the point at which awareness of the tenancy is likely by an absent owner.

But the relationship of the individual bilateral games is somewhat different in the character-of-use case, which lacks the element of time. In the duration game, the squatter was a completely passive player; the threshold over which he "crosses" to appear like an owner was determined by factors exogenous to him, since he can't do anything to induce a late protest. In the character-of-use game,the squatter selects his own signal. The owner in the duration game protests to prove that the possessor is a squatter; in the normal-use game he fails to protest because the possessor has proved himself a squatter.

B. CONTINUITY

The possession required to qualify for AP must be continuous; during the statutory period the property must be in use at every time when it would be normal to use it. There are two distinct justifications for this rule.

The first, as mentioned in the above citation from Merrill, is that a discontinous possession fails to satisfy

the notice function. Rashbam writes: "Perhaps since [the owner] is not constantly in town, [the squatter] occupied his house, and when [the owner] would come to town, this possesor would slip out, and thus this claimant never even knew that the tenant was occupying his house."[14] So there is no laches on the part of the PO, even if there is good possession on the part of the possessor.

The second reason is that discontinuous use is not the usual way an owner exploits his property. This reason is mentioned by numerous commentators. Rashbam writes that an owner can say to a tenant who abandons a field for an entire year "[Such use] reveals your private knowledge - that [the land] does not belong to you."[15] But if it is normal to leave this land fallow, we grant the LP, "since he made use of it in the normal way."[16]

Indeed, discontinuous use exemplifies all three of the abnormal-use problems discussed above. It is "discreet," since

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14 Rashbam tractate Bava Batra 29b, s.v. "**Hachi garsinan.**"
15 Rashbam tractate Bava Batra 29a, s.v. "**sh'achalan r'tzufot.**" The expression used - **galit a'daitach** - means literally "you have revealed your own knowledge," and is used for someone who inadvertently reveals their type through their actions, though they would have preferred to be perceived as some other type.
16 Rashbam tractate Bava Batra 29a, s.v. "**b'atra d'movri bagi.**"

the tenant is there less often and he comes and goes. It is front-loaded to the extent that he grabs whatever he can in the periods of use - anything more than the normal average for that short period is front-loaded. And an occassional user gets less benefit from a field than a constant user, and is more likely to opt for squatting over buying.

An interesting distinction between the two theories is provided by the case of a squatter who harvests continuously in a field which it would be customary to leave fallow. According to the notice interpretation, the AP would be valid **a fortiori**, since we are not even exploiting the leniency of a fallow year. This explanation is mentioned by the **Tur** in the name of Rav Yeshayahu. But according to the character-of-use interpretation, this would clearly be a front-loaded use of the land. The **Tur** himself rules that such an irregular usage is disqualified for an AP.[17]

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17 **Tur**, section **Hoshen Mishpat** chapter 141, law 4.

VIII. CONCLUSION

The granting of title to possessor after a certain amount of time in possession, as in the rule of adverse possession, is an efficient way of distinguishing owners from dishonest claimants; that is, it minimizes net social costs of proving ownership of real property. This was its original function.

The effect of procedural protocols on the optimal threshold was studied, and we concluded that the greater the standard of proof which is imposed on the possessor, the longer the optimal threshold. Therefore, AAL which at the passing of the threshold can only disqualify the prior owner, since an intermediate standard of proof is not applied, should logically have a longer statutory period than JL, where the passing of the AP threshold only means that the prior owner now bears the burden of proof.

We also examined the effect of the characteristics of non-possessory proof on the optimal threshold. If the most

economical **non**-possessory proof is very enduring, then it is optimal that we transfer to relying on possessory evidence, as in AP, only after a long period. We suggested this as another possible explanation for the longer threshold in early English law, under the hypothesis that testimony of livery of seisin has a slower rate of decline than does documentary evidence.

In England and America, the most prevalent case of adverse possession is not where the adverse possessor claims he purchased valid title, but rather where the possessor has important reliance interests in land he admits is not his. We concluded that indemnification of true owner is called for in this case, as suggested by recent research.

APPENDIX A

GLOSSARY OF LEGAL TERMS

Admiralty

A distinct jurisdiction in Medieval England. Originally founded to adjudicate criminal and civil cases originating at sea, it encroached heavily on other jurisdictions because merchants favored it and resorted to it whenever possible.

adverse

Refers to a use or possession which is evidently inconsistent with a claim of ownership by someone other than the possessor. A lessee does not possess adversely, since his possession is with consent of the owner.

Canon law

One of the distinct jurisdictions in Medieval England, that belonging to the Church. The ecclesiastical courts judged all moral offenses, which touches on property law and damages in such cases as defamation, usury, and breach of contract.

Chancery

One of the distinct jurisdictions in Medieval England, headed by the Chancellor, a minister of the Crown. Its function, like Equity (q.v.), was to judge cases for which appropriate procedures for adjudication did not exist in the rigid Common law.

cause of action

A tort for which a remedy exists at law. The existence of a cause of action is what begins the running of a statute of limitations (q.v.).

color of title

Describes a possession in which the owner assumes all the normal functions of title-holder, e.g., paying property taxes, making necessary regisrations, and so on.

Common law

The main jurisdiction in English property law, controlled by statute and precedent. Common law had the great advantage of universality and relatively known and fixed rules; but suffered from exceedingly inflexibly procedures.

decisor

In Jewish law, a scholar qualified to hand down binding legal decisions. (Translation of Hebrew **posek**.)

disseisin

A new seisin which non-consensually displaces a prior seissor. The displacer is a **disseisor**.

easement

A right over property which is attached to another property. For instance, the right of an owner of one plot to use a driveway on another's plot is an easement.

entry

The act of entering into possession of real estate. The entry itself, rather than the continuing possession, constitutes a cause of action.

Equity

A jurisdiction in English law, which originally dealt with wrongs not explicitly dealt with in any statute or writ, but which were nonetheless evidently "inequitable". The judgment was according to discretion. Over time a body of precedent was built up and Equity has come to adjudicate specific remedies in property law.

escheat

The legal doctrine by which properties which have no rightful owner (for instance, owner died intestate, or no known owner) become the property of the Crown.

law merchant

A distinct jurisdiction in English law, necessitated by the international character of trade, which required a mercantile law which meshed with foreign practices, and with the mobility of merchants, necessitating rapid hearing and deciding of cases.

mesne profits

Accrued rent owed by an evicted tortious possessor to the owner of the property for profits acquired during the time possessor acted as owner and failed to compensate true owner.

laches

Culpable negligence, especially negligence in defending one's own rights.

legal fiction

A fictitious circumstance assumed in a court case. A legal fiction is by definition not rebuttable. Such fictions enable a rigid procedure to accomodate a new type of tort, by adding "assumptions" essential to the use of the particular procedure. An example is the fiction of "lease, entry and ouster": there existed no writ (q.v.) permitting an owner to sue for the recovery of land which he did not possess. Therefore, the disseisee relied on a legal fiction that he had leased the premises to John Doe, and that John Doe had entered the premises and ousted the defendant, creating a possession (q.v.) in the plaintiff.

livery of seisin

The usual form of transferring property ownership in Medieval England. It was a formal ceremony held either on or within sight of the land being transferred, with numerous witnesses, in which the conveyor transmitted to the conveyee a symbolic token of ownership, often a twig or clod of earth from the property.

Mishna

A a second-century CE, six-volume compilation of terse legal "epigrams" summarizing the most important principles of Jewish Oral law. An individual such "epigram" is also called a Mishna (plural Mishnayot).

possessio pedis

Literally, a "foothold". Refers to a substantial use or enclosure of property.

possession

Actual physical sovereignty of a piece of real estate. When possession gains a distinct legal standing, whether legitimate or illegitimate, it is termed seisin (q.v.).

prescription

The acquisition or proof of acquisition of an easement (see) through prolonged enjoyment.

seisin (sometimes, **seizin**)

Exclusive and substantial possession of land which has become a recognized legal fact, whether legitimate or not. One who holds seisin is a **seissor.**

statute of limitations

Any statute which specifies that legal action against a specific actionable wrong is barred after a specified amount of time after the initial cause of action (q.v.).

Talmud

The Mishna (see) together with the **Gemara**, a seventh-century compilation of legal discussions based on the Mishna, which forms the basis of legal decision-making in Jewish law.

tort

An act causing damage or injury for which there is legal liability, in general because of willfullness or culpable negligence. Such an act is termed **tortious.**

transfer rule

Any fixed rule used to arbitrate competing ownership claims. For instance, a "negotiability rule" holds that in case of dispute, the party possessing the property is ruled owner.

writ

A summons to a defendant to appear at court. In the Medieval common law a limited number of rigidly defined writs existed, and no one could be summoned to court unless the case could be fit into the framework of wrong and remedy framed by a pre-existing writ. This limited the flexibility of the Common law on the one hand, and spurred ingenuity in expanding the understanding of existing writs by the use of linguistic extension and especially the use of legal fictions.

APPENDIX B

A BRIEF OUTLINE OF JEWISH LAW

WRITTEN TRADITION - PENTATEUCH AND KABBALAH

The primary source of Jewish law is the laws of the Pentateuch (the first five books of the Hebrew Bible) together with specific laws transmitted in Oral Law sources, constituting the "kabbalah" or "received tradition", which are considered to have been transmitted together with their traditional explanations from the divine Law-giver. This tradition "is materially different form the other legal sources of Jewish law, since it is not subject to change or development but is, by its very nature, static and immutable".[1] These amount to several hundred specific obligations and restrictions, of which a few score relate to property law, a comparable number relate to what is today considered criminal law and family law, and the vast majority relating to what is presently termed religious or ritual law.

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1 Menachem Elon, ed., **The Principles of Jewish Law** (New Brunswick, NJ: Transaction Books, 1974):14.

ORAL TRADITION - MISHNA AND GEMARA (TALMUD)

Ancient oral traditions of lesser canonicity, together with exegetical interpretations and extensions, and regulations promulgated by legal authorities - whose authority in itself stems from the authoritative Tradition already mentioned - formed by the beginning of the Common (that is, Christian) Era a body of many thousands of terse legal statements, which may perhaps be described as legal epigrams. These were not written but were memorized by students of the law. Scholars with outstanding knowledge of these laws and acuity in their interpretation were known as Tannaim (plural of Tanna). A fraction of these were collected in written form in the second century CE by the Tanna Rebbe Yehuda ha-Nasi as the Mishna, whose individual laws are referred to as Mishnayot. Laws which were not included in the Mishna are of lesser canonicity and are known as Braitot (plural of Braita, literally "external" law).

Scholars in the generations succeeding the redaction of the Mishna are known as Amoraim (plural of Amora). Their discussions were primarily aimed at elucidating the exact intention and appropriate application and extension of the

laws embodied in Mishnayot and Braitot; selected discussions, primarily of the scholars of Babylonia, were recorded and redacted in the seventh century CE by the Amoraim Ravina and Rav Ashi and constitute the Gemara. The Mishna and the Gemara together constitute the Babylonian Talmud. (A shorter collection of the discussions of the Amoraim of Israel were redacted earlier in the Jerusalem Talmud.)

The Talmud is a **de facto** canonical work, since it is impossible to rule in Jewish law in opposition to the conclusion of the relevant discussions in the Babylonian Talmud (in certain cases, it is possible to rule like the Jerusalem Talmud). However, these discussions are in a characteristic dialectical format which leaves room for tremendous flexibility in the application and interpretation of the law. Furthermore, the scope of the discussions is tremendous, including subjects which had no practical relevance in the time of the Talmud or indeed until quite recently; and modern Jewish legal decisors (those who make practical legal rulings) faced with ruling on the permissibility of organ transplants and the parentage of test-tube babies have found a plethora of applicable passages in the Babylonian Talmud.

EARLY COMMENTATORS "**RISHONIM**" UNTIL THE **SHULHAN ARUKH**

The scholars of the generations following the closing of the Talmud until about the eleventh century CE, at least those in Babylonia (who were the majority) are known as the Gaonim (plural of Gaon, from a root meaning "pride" or "majesty"). Until the discovery of the Cairo geniza (archives) around the turn of this century, comparatively little of their halachic works were extant. However, certain works from this era were known throughout the generations and had a lasting importance, including especially the philosophical works and commentary on the Pentateuch of Rav Sa'adiah Gaon.

The main work of establishing the foundations of the interpretation of the Talmud was that of the early Medieval scholars, known as Rishonim (plural of Rishon, "first"). In almost any involved discussion of Jewish law, the raw material of the investigation is drawn mainly from the commentaries of the Rishonim, who had remarkable abilities to express clear, logical and original legal theories and foundations which were at the same time firmly rooted in the Talmud. These found expression in three main categories of works: commentaries, codexes, and responsa - reasoned responsed to specific halachic inquiries.

It is useful to divide the Rishonim into Ashkenazic (French/German) and Sepharadic (Spanish/North African) schools, though these schools were far from isolated from each other. Among the Sepharadim, some of the most important were: Rav Yitschak Al-Fasi (the Rif), who wrote in the eleventh century CE a summary of Talmudic discussions together with their halachic conclusions and words of explanation. This was the first "codex" of Jewish law, and its influence was tremendous. Several generations later Rav Moshe ben Maimon (Rambam, Maimonides)(1135-1206) composed a monumental codification of the entire Talmud, divided into books and chapters by subject (whereas the Rif had covered only those areas of contemporary significance, and had written according to the order of the Talmud), as well as a commentary on the Mishna and many responsa. Maimonides' **Code** is to this day perhaps the most important comprehensive source-text of Jewish law apart from the Talmud itself.

Soon after, Rav Moshe ben Nahman (Ramban, Nachmanides)(1194-1270) wrote a detailed commentary on the Talmud (as well as on the Pentateuch). The Ramban may fairly be said to have started a "school" as the great Sefardic scholars of his era were mostly his students and students'

students. Among those strongly influenced by him: his cousin Rabeinu Yonah of Geronda, his student Rav Shlomo ben Avraham Adret (Rashba)(1235-1310), and the Rashba's student Rav Yom Tov ben Avraham (Ritba). Each of these individuals wrote an important commentary on the Talmud and many influential responsa.

Of the Ashkenazi scholars, the most famous is Rav Shlomo Yitschaki (Rashi)(1040-1105). Rashi wrote a commentary covering virtually every line of the Babylonian Talmud; only one or two tractates are without his comments. His commentary on the Bible is equally renowned. Furthermore, he founded a great school of scholars; of the most outstanding figures in France/Germany in the following generation, a surprising number were sons-in-law and grandsons of Rashi, and countless others his and their students. A more detailed and in-depth commentary to the Talmud was written by these "offspring"; it is known as the **Tosafot** (literally "additions"). All standard editions of the Babylonian Talmud since the invention of printing appear with the commentaries of Rashi and **Tosafot** on each page to explain the text.

One of these Tosafists, Rav Asher ben Yechiel (Rosh)(c.1250-1328) composed an important codification of the

Talmud in the style of the Rif. The Rosh moved in middle age from France to Spain and therefore helped introduce the Sefaradic schools to the Ashkenazic style of reasoning. His son, Rav Ya'akov ben Asher (ca.1269-ca.1340) wrote a code based on his father's but of much greater scope; this code, known popularly as the **Tur**, was extremely influential and became the basis of the **Shulhan Arukh**, the code of Rav Yosef Karo (1488-1575) which is in a limited sense authoritative.

Rav Yosef Karo was born in Spain in 1488 and driven out as a child together with the rest of Spanish Jewry in the infamous expulsion of 1492. He settled in Turkey and then in Israel. He composed very important commentaries on Maimonides **Code** and on the **Tur**, and on the latter based his own **Code**, known as the **Shulhan Arukh** ("laid table", as the laws are "ready for consumption"), which was meant to be an authoritative and comprehensive code of practical Jewish law, and indeed within his own lifetime was so received. Together with glosses by Rav Moshe Isserles (Rama, c.1520-1572) of Cracow, mostly indicating where Ashkenazic custom differed from the Sefaradic custom indicated in the original, it went through innumerable printings and inspired several important commentaries already in its first few years.

The **Shulhan Arukh** is authoritative in a much narrower sense than the Talmud. The most concise expression of its authority would be: a halacha explicitly mentioned in the **Shulhan Arukh** can not be decided against the **Shulhan Arukh** and its main commentaries, except in most pressing exceptional cases. Since the scope of the **Shulhan Arukh** is limited to practical contemporary laws, and since the main commentaries often dispute, expand on and interpret its text, its "canonization" did not have a constricting effect on the development of halacha, as has sometimes been alleged.

LATER COMMENTATORS - **AHARONIM**

Nonetheless, the **Shulhan Arukh** approximately marks the end of the era of the Rishonim, and Rav Yosef Karo himself is considered to be "the last of the Rishonim ("firsts") and the first of the Aharonim ("lasts")". Aharonim concerned themselves much less with original interpretations of the Talmud (though their contributions in this area are still quite significant), and much more with elucidations of the positions of the Rishonim. Among the most important Aharonim in the area of property law and judicial procedure are: Rav Yehoshua ha-Kohen Falk (ca.1550-1614; **Sefer Meirat 'Einayim** or

Sma); Rav Shabtai Kohen Rappaport (**Siftei Kohen** or **Shach**); Rav Eliyahu of Vilna, known as the "Vilna Gaon" (**Beur ha-Gra**); and Rav Aryeh Loeb ha-Kohen Heller (1745-1813; **Ketsot ha-Hoshen**). Their commentaries on the section **Hoshen Mishpat** of the **Shulhan Aruch** appear on the page together with the original text in all standard editions, just as the commentaries of Rashi and Tosafot appear together with the text of the Talmud.

COMMON LAW VS. STATUTE LAW

The distinction between common law and statute law systems of judgment is that in statute law the judge has reference primarily to the language of the relevant statutes, whereas in common law he has reference primarily to precedent. Obviously statute-law judges must consider precedent in interpreting statutes, and common-law ones must conform to relevant statutes, but the distinction is quite significant nonetheless. England and many of its former commonwealths, including the United States (excepting Louisiana), employ a common-law system, whereas Continental Western European countries have a statute-law system.

Jewish law would seem fit most neatly into the "common-law" mold. While all rulings must be in accordance

with the Talmud, this work is not most usefully regarded as a set of statutes insofar as laws can be deduced from it on the whole only through its characteristic dialectics, which are theoretically of arbitrary scope. The basis of practical decisions is the citation of precedent. While a recognized scholar may in certain cases base a decision on an original interpretation of the Talmud, if he can provide it with a well-argued basis in early commentators, this is not so much like statute law as like the sort of judge-made law associated with the common law, where the acceptance of the "law" is proportional to the standing of the judge.

In one sense Jewish law goes even farther in recognizing "judge-made law" than even the common law, insofar as a position explained in a theoretical work can be used to support a practical decision. For instance, a decisor may explain that he is ruling in accordance with the position of Rashi in his commentary on the Talmud, even though Rashi never actually judged such a case. This would be comparable to a judge citing a Law Review article in his dicta.

Different decisors of course tend toward different poles. Whereas Rabbi Ovadiah Yosef, former Sepharadi Chief Rabbi of Israel, is famous for his encyclopedic citation of

early and late previous responsa in his own responses to halachic inquiries, the late Rabbi Moshe Feinstein of New York was almost unique in the modern era for the frequency with which he would rule with direct reference to the relevant Talmudic passage, according to early commentaries.

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