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FRAUD OR COMPETITION? SOME IMPLICATIONS OF TRADEMARK LITIGATION IN THE UNITED STATES

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ABSTRACT

Trademarks are defined under the United States legal system. Legal and economic explanations of their origin and purpose are reviewed. Litigation is seen to be important to all explanations. Data on litigation are examined and a probit model built to explain the success of brand owners in litigation about the marks. Several of the explanatory variables are highly significant in explaining success, but one key variable is significant only for brand owners who are infrequently cited in the published records. For those brand owners who are repeatedly cited, the key variable is not significant. The implications of the difference between the two groups are discussed and the tentative conclusion reached that repeated infringement of a trademark may in time be seen by the courts as competition rather than fraud.

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1. INTRODUCTION

1.1 Definition of Trademarks

Trademarks are a form of intellectual property right enforceable at law in the US under Common Law, Federal statute law, and under the statutes of about one third [Wolf 1984] of the states.

Legally, trademarks are defined under the Trademark Act of 1946 (known as the Lanham Act) as,

"... any word, name, symbol, or device, or any combination thereof adopted or used by a manufacturer or merchant to identify and distinguish his goods, including a unique product, from those manufactured or sold by others, and to indicate the source of the goods, even if that source is unknown". [15 U.S.C. Section 1127].

They therefore comprise not only the familiar logos and symbols which come to mind when the word trademark is used (Nabisco's cross of Lorraine, for instance, or Coca-Cola's flowing signature) but also brand names (Sunkist), trade and service names (McDonald's), trade dress (the shape of the Pizza Hutt buildings), certification marks (Scotch whisky), and collective marks (the Lions' Club).

1.2 Origin of Trademarks

Trademarks date back many thousands of years [Diamond, 1983; Fletcher 1983] and were initially associated with quality control and property ownership. The slaves in Mesopotamia who made bricks marked the bricks to establish responsibility for workmanship: they themselves were probably marked or branded to establish ownership. Hence the basic idea behind brands and trademarks is that they denote the origin of a product.

The origin concept still remains as the basis of modern American law, but the marks themselves have come to have a wider significance outside the law either as a property right to which rents might accrue - a development linked to the use by medieval guilds of marks as checks on output -, or as a part of information markets. This latter concept dates back to the industrial revolution and to the development of mass-produced differentiated products.

The marks are therefore explained in three somewhat different ways in the various literatures, depending on the source of the literature and the viewpoint of the author.

2. EXPLANATIONS OF TRADEMARKS

2.1 The Legal Explanation

The legal explanation of the marks in the US puts substantial weight on the early concerns with origin and quality [Mead Data Cent v Toyota Motor sales U.S.A. 702 F. Supp. 1031]. The marks are assumed to indicate the unique origin of a product in order to provide consumers with information about responsibility for the product. If someone infringes or copies a mark, they are confusing the consumer as to the origin of that product, and hence committing a fraud against the consumers.

The trademark laws, common and statute, are therefore all "part of the branch of tort law known as unfair competition" [Landes and Posner 1987], and are nominally pro-consumer, rather than pro-producer. They do not grant a monopoly property right to the trademark owner in the manner of copyright and patent laws. Instead the law merely registers and protects marks which are already in use and which are "...appurtenant to an established business..." [United Drug Co. v Theodore Rectanus Co., 246 U.S. 90,97 1918].

Similarly the law does not allow anyone to create monopolies of language by using or registering as trademarks generic words or descriptive words without secondary meaning, since to do so would be to create barriers to entry in information markets. If a trademark should become so well known that it becomes the generic world for a product (as did Aspirin, Cellophane, and Thermos) then that mark is cancelled.

Much of the litigation in the US is therefore of two sort. The first comprises a series of cases brought against producer defendants by producer plaintiffs who are owners of marks, and who are assumed to be to be acting on behalf of confused customers. The penalty the plaintiffs seek from the defendant is usually an injunction to desist. Damages are awarded only in extreme cases.

The second comprises a series of cases brought by producer plaintiffs who are not owners of marks against producer defendants whose marks are alleged to have become generic. Here the penalty sought is cancellation of the mark.

Note that, although the law is nominally pro-consumer, the fact that the rewards and penalties accrue to the producers as a result of litigation initiated by producers makes the law a potential weapon for competitive advantage for the producer. Nevertheless, confusion is still nominally the basis of any court decision.

The most clear statement of the decision-making process is in infringement cases is stated in what are known as "The Polaroid Factors" from the 2nd Circuit [Polaroid Corp. v. Polarad Elecs. Corp. 287 F 2d 492,495 2nd Circ.]. The Polaroid factors state that confusion is likely if:

- the plaintiff's mark is valid (i.e. used or registered);
- the plaintiff's mark is strong (as evidenced by length of use, advertising expenditure, conceptual strength, lack of third party use, volume of sales);
- there is a high degree of similarity between the products and marks of defendants and plaintiffs;
- there is a likelihood that the senior user will enter the market of the junior user;
- the defendant has acted in bad faith;
- there is evidence of actual confusion;
- the buyers are unsophisticated;
- either the poor quality of the defendant's goods creates negative externalities for the plaintiff, or the good quality creates similarities - a no-win situation for the defendant.

If the balance of these factors favours the plaintiff, then the plaintiff will win.

Note once again that these are infringement cases. In genericisation cases the owner of the brand may lose if the brand is too strong (i.e. if it has become genericised).

2.2 The Economic Explanations

Whatever the law might think about their purpose, trademarks are worth money to the producer. Internationally Exxon spent about $US100 million developing its new brand name [Fletcher 1982] while the capitalised value of the Coke and Coca-Cola marks is estimated to be in the order of US $3 billion [Gershman 1986].

It is something of a surprise therefore to find that the marks are poorly modelled in the economic literature [Baden Fuller 1981] and that there is only one formal economic model of the marks [Landes and Posner 1987].

In general the economic literature discusses a number of issues closely related to trademarks - product differentiation for instance - rather than the marks themselves, and in this context develops ideas which

can be used to provide a competitive explanation of the marks (they contribute to efficient information markets) and a non-competitive explanation (they may create barriers to entry).

Schmalensee [1982 and 1987] provides the most convincing arguments for product differentiation as a device for increasing price above marginal cost, while the Landes and Posner model of trademarks [1987] argues the pro-competition approach. Somewhere in between these two lie the product differentiation models of such writers as Hotelling [1929], Salop [1974] and Klein and Leffler [1981]. These models suggest that product differentiation will always result in price greater than marginal cost, but may not result in supranormal profits.

Most of the product differentiation models are not generalisable, and there is little if any empirical evidence other than anecdotes to confirm either the pro-competitive or the anti-competitive viewpoint.

Note however that both the competitive and the non-competitive explanations of the marks require a consideration of the role of litigation in preventing free riding on the good-will attached to the marks. The non-competitive explanation also requires a consideration of the role of the law in preventing or creating monopoly. Litigation is therefore of concern to the economist whichever viewpoint the economist adopts.

3. TRADEMARK LITIGATION

3.1 The Representativeness of Litigation

It is a generally accepted thesis [Priest and Klein, 1984] that disputes which lead to litigation are not representative of the total universe of disputes in any particular class. Cases about whose outcome both plaintiff and defendant have symmetric expectations will generally tend to be settled out of court since the outcome is reasonably agreed and court action is costly. Litigated cases will therefore tend to represent the difficult cases, about whose outcome expectations are asymmetrical. These cases will tend to cluster round the decision standard, and will on average tend to favour neither defendant nor plaintiff. This hypothesis, known as the 50% hypothesis is expected to apply in most types of litigation with certain provisos about symmetry of stakes and of error terms.

Unfortunately most published data on litigation relates only to the non-representative disputes which go to court, and as a consequence much of the empirical work done by economists on litigation concerns tests of the 50% hypothesis. Maughan [1991] an trademark litigation belongs to this area of research.

Lawyers and trademark attorneys are, however, mainly interested in the published data for the light it throws on judicial decision standards, and cases are selected for publication in legal records with this in mind. Accordingly it is possible to view the published data as a guide to win/lose decisions, particularly where the data relate to defendants or plaintiffs who have asymmetric gains or losses. (The 50% hypothesis will not necessarily apply where there are asymmetric stakes). Certain types of trademark litigation such as counterfeiting and genericisation come into this category.

If this viewpoint is adopted the published data can be used to build models which predict a win or a loss on the basis of certain explanatory variables derived from the published court records. Such a model is set out below.

The model is a probit model in which the dependent variable is Y = 1 for a win or 0 for a loss by the brand owner, and the explanatory variables are a vector X, of selected Polaroid factors. It derives from Maughan [1991].

3.2 Data Source and Methodology of Probit Model on Trademark Litigation (Maughan 1991)

Two random samples of published trademark litigation were drawn from Federal District Court cases cited in Shephard's Citations (Trademarks 1988). This source provides the definitive guide in the US for published litigation on the marks.

Dataset 1 comprised 250 usable cases litigated in the district courts of the US over the last twenty years and was designed to provide an overview of typical district court litigation. Appeals and repeated litigation against the same company were omitted in order to preserve the independence of the observations.

Dataset 2 comprised all independent (i.e. not pursued against the same company) litigation at District Court levels for 45 different firms selected from a population of all firms with more than three different citations. There were 231 cases litigated by the 45 firms in this category, and the companies included the owners of many well known brand names such as Coca Cola. There was no time limit on when the litigation took place.

The basic idea behind the selection process was to have one sample group representing the average case litigated (Dataset 1), while the other group represented companies who tended to litigate frequently (Dataset 2).

Each of the 482 cases was read in detail and key explanatory variables related to the Polaroid factors were coded from the record of the court case. A win/loss for the owner of the brand was also recorded to give the explained variable.

It became apparent during the coding process that several of the explanatory variables were so normative (bad faith, for instance) that they could not be used as explanatory variables without the possibility of introducing bias. However the following, reasonably positive, explanatory variables were used in the probit model:

- AGE1 = number of years between court case and establishment of brand. This variable is a measure of the strength of the brand. The larger the value of the variable, the stronger the brand.

- SIM1 = 1 if trade marks are identical (as in counterfeit goods), or are considered by the judge to be virtually identical. Judgement is made after considering the mark in its entirety for visual and oral resemblance. Otherwise SIM1 = 0.

- SIM3 = 1 if trade marks are considered by the judge to be similar but not identical. Otherwise = 0. Originally included as a normative variable to test hypotheses about the influence of normative variables.

- TYPE1 = 1 where plaintiff and defendant have the same product and the same 4 digit SIC code (i.e. litigation where both plaintiff and defendant produce the same product). Otherwise TYPE1 = 0.

- TYPE2 = 1 where plaintiff and defendant have different 4 digit SIC codes, but the same product (vertical litigation e.g. manufacturer v. retailer). Otherwise TYPE2 = 0.

- TYPE3 = 1 where plaintiff and defendant have different 4 digit SIC codes and different products (conglomerate litigation). Otherwise TYPE3 = 0

- TYPE 1a The product of SIM1 and TYPE1. i.e. all cases in which plaintiff and defendant had the same product and same 4 digit SIC code and brands that were adjudged to be identical. This is the closest group to counterfeit cases.

- TYPE 1b The product of SIM3 and TYPE1. i.e. all cases in which plaintiff and defendant had the same product and same 4 digit SIC code and brands that were adjudged to be similar but not identical.

The explained variable was

- WIN1 = 1 if the owner of the brand won the case.

Otherwise WIN1 = 0.

The model was a probit model of the general form

$$Y = a + \beta X + \varepsilon$$

where Y = win/lose
a is an intercept
X is a vector of explanatory variables
an ε is a normally distributed error term.

3.3 Hypotheses and Results from Probit Model

3.31 Expectations and Hypotheses

The coded Polaroid factors which provide the basis for the explanatory variables would suggest the following outcomes might be expected.

The probability of a win by the plaintiff would be enhanced by the length of time the brand had been in use, and by the degree of similarity of both product and brand between plaintiff and defendant. Thus AGE1 would be expected to be positive and significant, SIM1 would be expected to be positive and significant and TYPE 1 would be expected to be positive and significant.

About SIM3 (a variable heavily dependent on the judge's call) it was hard to form expectations since it was not as critical as SIM1 and might have only a marginal effect on the outcome of the trial. As to the composite variables, TYPE1a which is the product of SIM1 and TYPE1 would be expected to be positive and significant, while TYPE1b might be of either sign and of greater or less significance depending on the interaction of TYPE1 and SIM3.

These expectations, which we might think of as alternative hypotheses, say that in effect the older the brand is (i.e. the higher the value of AGE1), the greater strength and validity it will have, and the more the judge will be inclined to favour its owner. The judge will be particularly favourable where the infringement comes close to counterfeiting (i.e. identical product, identical SIC code, and identical brand as in TYPE1a).

There is, however one proviso: if the brand were on the point of being declared generic all these factors might count against it, since many producers might be attacking the brand by using identical brands, and the brand might have been around for many years. (The word Cola for instance was declared generic some fifty years after Coca Cola was first produced).

3.32 Results

The results of two runs of the probit model are given below in tables 1 and 2.

Table 1

PROBIT MODEL 1 RESULTS Y = WIN1				
	Dataset 1		Dataset 2	
Explanatory Variable	t-ratio	Sig.Lvl.	t-ratio	Sig.Lvl.
INTERCEPT	-1.939	.05254	2.288	.02214
AGE1	2.832	.00463	-0.325	.74545
TYPE1a	3.700	.00022	0.565	.57183
TYPE1b	2.250	.02444	-1.732	.08325
TYPE3	-1.598	.10996	-1.897	.05781
% Correctly predicted	65.2%		60.6%	

Table 2

PROBIT MODEL 2 RESULTS Y = WIN1				
	Dataset 1		Dataset 2	
Explanatory Variable	t-ratio	Sig. Lvl.	t-ratio	Sig. Lvl.
INTERCEPT	-0.183	.85471	0.543	.58709
AGE1	1.821	.06856	-0.694	.48789
TYPE1	-0.175	.86111	-0.335	.73747
TYPE 3	-2.554	.01064	-1.395	.16293
SIM1	3.851	.00012	3.323	.00089
% Correctly predicted	66.4%		64.9%	

Table 1 shows that TYPE1a and AGE1 are for Dataset 1 exactly as we would expect under the alternative hypotheses outlined above. Both variables are positive and both are highly significant. We had no expectations of TYPE1b and TYPE3, but they show up respectively as positive and significant, and negative and significant at the 11% level.

However for dataset 2, neither TYPE1a nor AGE1 are significant; and AGE1, TYPE1b, and TYPE3 are negative. TYPE1b and TYPE3 are significant at the 6-8% level.

These outcomes are, to say the least, odd. What the model is saying is that those brandowners who are cited in the litigation most often (Dataset 2) are less likely to win counterfeit cases (TYPE1a) than those who are cited only occasionally. Both groups are unlikely to win cases where the products are different (TYPE3), and the evidence is mixed on TYPE1b cases.

Table 2 investigates this oddity by breaking down the TYPE1a variable into its component parts - namely TYPE1 (litigation where plaintiff and defendant have the same product and the same SIC code)

and SIM1 (identical brands). Note that the new variable TYPE1 has a larger number of observations than in TYPE1a because it includes the TYPE1 observations from both TYPE1a and TYPE1b. It will therefore enter the second run of the model in a more diluted form than in the first run. Note also that SIM1 also includes a larger number of observations than in TYPE1a since it know includes all cases in TYPE1, TYPE2, and TYPE3 where the judge decided the marks were identical.

Table 2 shows the effect of this separation and expansion of the variables. SIM1 is of the correct sign and highly significant for BOTH datasets, implying that direct copying of a mark in any case whatsoever is frowned upon by judges. However the other variables are very mixed in impact. In Dataset 1, AGE1 is positive and significant at the 7% level and TYPE3 is negative and significant at the 1% level. Type 1 has the wrong expected sign and is insignificant. In Dataset2 the only variable other than SIM1 which is mildly significant (at the 16% level) is TYPE3 which has a negative sign.

We might interpret this data as follows. Judges are heavily influenced by the extent to which a brand is copied. The closer that two brands come together, the more likely it is that the case will favour the brand owner. This effect is however tempered by other circumstances. if the brands relate to different products (Big Mac Trucks: Big Mac Hamburgers), then the judges are less likely to favour the brandowner, and for those who are infrequently cited in the litigation the longer they have owned the brand the more likely the are to win. TYPE1 does not seem to affect the outcome for either dataset in a significant fashion.

This last conclusion is again odd. Why is it that SIM1 which is highly significant in both datasets, and TYPE1 which is insignificant in both sets, when multiplied together to make TYPE1a, enter the model (Model 1) in different ways? In Dataset 1 TYPE1a is highly significant: in Dataset 2 it is not.

One explanation must be that the win rate associated with SIM1 (which is applicable to all TYPES) differs between TYPES and/or between the Datasets

Tables 3 and 4 show that this may well be the explanation.

Table 3

NUMBER OF OBSERVATIONS BY TYPE				
	Dataset 1		Dataset 2	
	No.	%	No.	%
TYPE1	164	66	137	59
TYPE2	33	13	44	19
TYPE3	53	21	50	22
TOTAL	250	100	231	100
SIM1 only	75	30%	142	61%

Table 4

% WIN/LOSE BY TYPE AND DATASET												
	Dataset 1						Dataset 2					
	Win		Lose		Total		Win		Lose		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
TYPE1	34	85	6	15	40	100	50	69	22	31	72	100
TYPE2	16	73	6	27	22	100	32	75	11	25	43	100
TYPE3	8	62	5	38	13	100	17	63	10	37	27	100
TOTAL	58	77	17	23	75	100	99	70	43	30	142	100

Table 3 gives a summary of observations by type, and shows that it is those who are most frequently cited in the published literature (Dataset 2) who have the highest proportion of cases where brands are judged to be identical. Table 4 shows that these heavily cited litigants are more likely to lose TYPE1 cases (31% loss) than the infrequently cited group (15% loss). The difference is significant at the 5% level in a two sample difference test.

4. CONCLUSIONS

The basic conclusion from the information given in section 3 is that those who are often cited in the published litigation are in fact less likely to win a counterfeit case than those who are infrequently cited.

Since those most heavily cited are usually long established and often well known brands, the inference can be made - particularly when it is remembered that AGE1 is not a significant variable for this group despite their longevity - that brands become increasingly vulnerable to attack with age. In other words judges are more and more likely to lean towards genericisation arguments as brands become well known. This inference is subjectively supported by a reading of the cases (the author read some 700 cases which were litigated over the last 90 years).

Superficially this conclusion is satisfying to those who support competition on the grounds of efficiency, since it tends to confirm to the notions that imperfect markets are transient phenomena [Reder 1982], and that the law enhances rather than inhibits competition [Landes and Posner 1987]

Nevertheless there are a sufficient number of unanswered questions to raise doubts about the validity of this superficial conclusion.

Why for instance, would an individual company, at cost to itself, but at benefit to all companies if it succeeds, attack a brand in the hope of having the brand declared generic? The only implication can be that there are enough rents from the brand to share around, - which suggests that the brands are barriers. And how long is "transient"? It was after all fifty years after the first appearance of Coca Cola before the word Cola was declared generic in the US. And what about brandowners who do not go to court or who are not cited? Is it because they have nothing to fight about, or is it because they are too powerful to challenge?

This study cannot answer these questions. It merely points to some evidence and draws a tentative conclusion: in the long term all brands probably erode. However in the short term they may well create considerable rents for their owners. Whether or not these rents are dissipated by advertising and the like [Klein and Leffler 1981] is a matter for debate.

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