

SUPERSTORES AND THE EVOLUTION OF FIRM CAPABILITIES IN AMERICAN BOOKSELLING

DANIEL M.G. RAFF*

The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania, U.S.A. and National Bureau of Economic Research Cambridge, Massachusetts, U.S.A.

This study considers the transformation of book retailing in America ca. 1970–95. The major transition was less modal sales venues shifting from Central Business Districts to suburban locations than the rise of extremely broadly merchandised 'superstores' and their supporting infrastructure. The paper documents two superficially similar but from a capabilities perspective quite different superstore business models, one identified with Borders and the other with Barnes & Noble. The two companies' key capabilities originated and developed in distinctive ways, one oriented around the management of information and the other around scale. Complementarities and the persistence of core capabilities are striking features of the organizational histories, but so is—over a fairly extended period—evolutionary change. Copyright © 2000 John Wiley & Sons, Ltd.

INTRODUCTION

Our images of the colonial America usually involve a relatively primitive economy with relatively low levels of per capita income, no factories and generally low levels of technology in the cities and towns, and much of the population engaged, in isolated places and for long and terribly demanding hours, in agriculture. Yet the colonists were predominantly people of the word, and there was a flourishing trade in publishing and bookselling from a very early date (Tebbel, 1972). The book trade has been with us ever since.

The distribution part of the industry has since undergone tremendous change, not least in the latter decades of the twentieth century. It was in that period that chain stores became a dominant

force in retail bookselling. This proceeded in two phases. During the first, the stores of the chain companies were of roughly the same size as those of the independents. The principal nonorganizational difference between the two was locational: the independents were predominantly sited in central business districts and the shopping streets of towns, while the chain stores were predominantly to be found in suburban and regional malls. In the second phase, the chain stores became an order of magnitude larger than the modal independent (on a wide variety of metrics) and began to seem in the breadth of their merchandising more like libraries than shops.

The subject of this paper is the second of these transitions: the emergence of the so-called superstores. The phenomenon is striking. In 1975, there were no bookstores with anything like these characteristics anywhere in the United States outside of a few large cities and at most a handful of university towns. At the close of the century, they are a commonplace of the urban and suburban landscape. The natural interest of the book-

Key words: books; superstores; retailing; information; competition; evolution

*Correspondence to: Daniel M.G. Raff, The Wharton School, University of Pennsylvania, 2000 Steinberg Hall–Dietrich Hall Philadelphia, PA 19104-6370, U.S.A.

selling business to academics entirely aside, one might reasonably wonder when, how, and why this came about. This interest is only heightened by the diffusion in other lines of retail trade of apparently similar formats (generically known as category-killers). This paper lays out the history in books, with a focus on the evolution of the capabilities required to sustain the new formats and operations.

The paper takes the form of a clinical study. There are no formal hypotheses and there are certainly no formal tests. Rather, the paper follows the early lifecourses of the only two firms that mattered quantitatively and attempts to expose, in an intellectually disciplined way, the opportunities which were recognized, the challenges which then presented themselves, and the responses as they evolved. This may seem to represent more modest progress in knowledge than the usual positivist empirical work puts on offer. But the approach exposes issues and relationships which are obscure in the standard statistical data and may be worthy of thought.

The heart of the paper is narrative, but narratives always have ideas in the background. The ideas in the background here are those of the resource-based view of the firm (Wernerfelt, 1984; Barney, 1986, 1991; Peteraf, 1993) and of evolutionary economics (Nelson and Winter, 1982). Special attention is therefore paid to the processes by which firms conduct their businesses, to the influence these processes have on what makes particular firms differ in profitable ways, and ultimately to the influences these competitively valuable differences can exercise on the development trajectories of the firms in question.

The basic finding is simple. There are two major book superstore chains. The stores look superficially very similar. They are certainly very different, in many very similar ways, from the format they displaced. But the commonalities mask striking differences in approach, apparently quite stable, rooted in the initial resources of the two companies and the natural trajectories for developing and exploiting the resources.

Because of the prominence of the firms the paper focuses on, some of the developments discussed below have been the subject of articles in widely read newspapers such as the *New York Times* and the *Wall Street Journal* and in various magazines. These accounts are generally well written, but they are equally generally unhelpful

in understanding the issues of interest here. The evidentiary basis of the paper does not overlap with them. The paper is instead based on extensive interviewing among industry participants (both at the retail level and upstream of it), personal investigation of many facilities (both of the focal firms and of specific competitors), and a detailed reading of the trade press over the entire period. The retail interviewing included individuals who were principal actors (that is, executives with operating responsibilities and experience) in the focal firms both at the time of the events in question and later and also principal actors in carefully selected competitor firms (some in their positions at the time of the events in question and all with close knowledge of the events.) The focus of the interviews was on business systems and on the circumstances of and thinking behind key strategic decisions. Relative to the widely read accounts, this is novel.

THE ORIGINS AND EARLY DEVELOPMENT OF BORDERS

Thomas and Louis Borders grew up in Louisville, Kentucky. Thomas went to college at Notre Dame, Louis to the University of Michigan. Thomas went on to Michigan for an M.A. in English literature. Louis went east to MIT, continuing to study mathematics though shifting his focus from the pure to the applied side. After a brief period abroad, Thomas returned to Ann Arbor. Louis dropped out of MIT and joined his brother.

Life in Ann Arbor was dominated by the University of Michigan—nearly half the town's population was either employed by the university or enrolled in it. The university was one of the two or three most prominent public universities in the United States. Its faculty numbered more than 3000 and was famous for advanced research activities. The student body of nearly 25,000 studied at an undergraduate college and a breathtakingly broad complement of graduate and professional schools. All of these people spent a great deal of their time reading. A great deal of what they read was books. Louisville had not been a great book town, but both Borders brothers had from a young age developed a keen interest in books. It had only grown over time. Contemplating what to do with their lives and where to

do it, it had seemed to the Borders brothers that there might be a living to be made in Ann Arbor in the book trade.

They started a used bookstore in the late 1960s. That business is generally both frustrating and unexciting. It is frustrating because the good acquisitions sell quickly and the bad ones stay, just another volume on the shelf to the browsing customer but an increasingly conspicuous mistake, and an increasing burden on working capital, to the bookseller. To do well, a used bookstore owner needs to be constantly replenishing the good acquisitions, and to do that from Ann Arbor in those days would have required a burdensome amount of travel. At the high end, the business is about buying and selling collectible objects rather than texts the customer will enjoy actually reading—a perversely unintellectual relationship with the objects of sale, some thought. It is also a business in which the stock turns over perhaps once a year on average. Opportunities to make decisions—correct or mistaken—were infrequent. The Borders brothers were young. It just wasn't the right life.

As the shine wore off the idea of selling used books, the brothers began to contemplate a different business model. There were at the time roughly a dozen bookstores selling new books in Ann Arbor and its immediate vicinity. Appendix 1 lists the bookstores and characterizes their stock as of the time when the Borders brothers opened their first retail store. About half of these, and all of the relatively large ones, were literally across one street or another from the central core of the university. Almost all the stores were very close. Most of these sold texts and other assigned books, a more or less modest selection of other books, school supplies, pennants, and clothing with a university logo. The merchandising of the nonassigned books was generally either narrow or dull. But the university community was large, diverse, curious about books, and naturally acclimatized to buying them. The Borders brothers sensed tremendous unmet demand and no real competition.

'We just wanted to run a good bookstore,' Thomas Borders has remarked. Goodness in this context meant variety—the breadth of the offerings. The focus was to be on the customer. Ann Arbor had many intellectually adventurous book buyers; and the idea was to offer them a very broad selection of unusually interesting books,

whatever those might be. The brothers consciously refrained from focusing on a specific product segment such as academic books. The notion of offering no trade books seemed perverse as well as condescending. Their basic idea dictated a much wider range than that.

Borders was hardly the first bookstore to focus on a very specific local customer base. Successful independent bookstores like Cody's in Berkeley and the Seminary Co-op in Hyde Park have long built their trade on an intimate knowledge of the wants of their communities. But the Borders brothers pursued this strategy much more comprehensively and went far further with their solutions.

At the time, important features of many bookstores' operations did not seem to have been organized to please or tempt the customers, still less to maximize the ultimate profits. Consider the most salient example in Ann Arbor's part of the country. Even in the great Kroch's and Brentano's store in the Loop in Chicago, the largest bookstore in the Midwest in that period, books were within broad categories generally shelved by publisher. This made the instruction 'Find me four Jane Austin novels' something of a challenge and certainly time-consuming for the customers. It also made keeping track of Jane Austen sales relative to Henry James sales difficult. The people it made life easy for were in the channels of distribution. They were allowed to behave as rack jobbers, just like the people who keep the shelves for chips and sodas in convenience stores such as 7-11s fully stocked. This system was very convenient for their doing their own inventory checks and making suggestions about optimizing their own offerings. The Borders brothers instead sought to think through how the bookstore itself ought to present its offerings if its objective was to make finding and opening up books, and contemplating buying them, easy and attractive. The Borders brothers thus wanted to work backwards from desired outcome towards operations, always keeping the perspective of the customer.

Thomas and Louis began their retail operations in 1971 by leasing a 2000-square foot storefront on the main commercial street running near the campus. Thin and deep, it was a good shape for a bookstore intent upon drawing customers in. The brothers found, without particularly looking, that the incremental value of adding titles was strongly positive; and so they added more and

more. With their growing breadth of offerings, they increasingly felt the need to monitor their holdings systematically. So Louis wrote a relatively simple computer program to track inventory. The program and its successors became more and more sophisticated over time as more efficient approaches and greater functionality were added.

At first the programs simply tracked what stock they had on hand. This was not a small feat in itself. By the time they began to outgrow the site, their computing demands obliged them to rent time on an IBM System 3 mainframe and to run the program at night.

Assortment breadth continued to grow and the business continued to prosper. The Borders brothers had in fact discovered an unmet need. A site of 11,000 square feet spread out over two floors, attractively situated on the same street, became available. At first, the second floor was used only for operations. But bookcases displaying merchandise kept encroaching into that space and attracting customers who bought the books. Gradually the bookcases won. The brothers rented warehouse and back-office space in a lower-rent district. By this stage, a printout of their inventory, which they laboriously generated on a dot-matrix printer every 2 weeks, ran roughly a thousand pages. Each book in stock had a control card—essentially half an IBM punch card—in it; and when the book sold, these were collected at the cash register and forwarded reasonably promptly to data processing. So Borders could in principle keep its inventories more or less in real time by monitoring the flows in and out, in the process establishing sales records by stock-keeping unit in the process.

The people who made the selections of what to put on the shelves were called ‘buyers’ and were roughly half a dozen in number. Indeed, they were buyers just as the word was used in the early days of department stores (Hower, 1943). They had managerial responsibilities in that they made merchandising decisions. But they also worked on the sales floor, sometimes rang up sales, spoke casually with customers, and even listened in as customers talked or thought out loud about what items they wanted but found unavailable. The buyers’ most valuable attribute wasn’t particularly their youth (some stayed 20 years) or their ability personally to draw customers into the store but rather their knowledge

of both the tastes of the Ann Arbor population which might be enticed into considering books in their category and of the books these potential customers might be offered.

This knowledge could not be used in an abstract, frictionless setting. The order cycle was quite lengthy in the early 1970s. Borders would sell a book on Day 1 and know this fact informally through a review of the control cards in the store on Day 2. But at that stage the business couldn’t support the fixed costs of a back-office staff large enough to confirm details and make up order forms every day or to deal with the inevitably more numerous incoming shipments and all the checking and correspondence associated with each arrival. The company kept the fixed costs of leasing computer time down by running the inventory program and sending out the orders only at intervals. Once an order form was actually filled out, the order went into the mail. Once it arrived at the publisher (which it did almost all of the time), the question of meshing with the publisher’s fulfillment cycle arose. Then there was the shipper, and the actual shipping. It might, in those days, be Day 85 or Day 92—12 or 13 weeks after Day 1—before the replacement actually arrived.

Demand conditions could easily have changed over such an interim. Indeed, Louis Borders noticed, they might have changed favorably as well as unfavorably. Some books had a pronounced appeal but to a sharply limited group of customers, and some held a markedly seasonal attraction. But some had a large latent clientele and sold chiefly on reviews, recommendations, and word-of-mouth. It was very desirable for the buyers to have whatever assistance might be available in forecasting what demand for a particular title would be. This became particularly valuable as the number of new books published each year grew vigorously. As Louis’s inventory software grew increasingly sophisticated, it came to incorporate increasingly subtle decision support information and increasingly subtle characterizations of what individual books (i.e., stock-keeping units) were like.

The software actually developed in discrete stages. Upgrades and other unavoidable changes in hardware and system software necessitated application software revision. A stable platform might have led to slow and relatively continuous change. But the computers, as well as the business, evolved in bursts.

The first system went into use not long after 1971. This was the card-based system for tracking on-hand inventories. It covered the single store. It incorporated no notion of a purchase order: the card was generated when the book arrived. Because time on the mainframe was in fact fairly expensive, they ran the program only at intervals. So the brothers in fact went for extended periods not knowing what their stock was.

The second phase went into use ca. 1974. This could distinguish incoming books from those on hand, a capability useful both for buyers and for anyone dealing with customers. This generation of the software was in fact capable of running several stores so long as there was only one warehouse or distribution center. More important at that stage, it had forecasting capabilities—linear regressions, in effect. The calculations were not very complex; but they were a very far cry from the system at Kroch and Brentano's.

Later versions followed rapidly. They exploited the emerging bar-coding and scanner technology (Brown, 1997). They could handle a more complex network of distribution centers and stores. Even more importantly as time passed, the software grew much more sophisticated in its forecasting capabilities. For as the company's scale grew, the merchandising process became an increasingly intolerable burden on the established buyers. It took years to train new buyers with the skills and knowledge the company wanted, and the old ones increasingly desperately needed help. So the ultimate phase of software development was an expert system. The fundamental design principle was that any information about a book the buyer would use in making a decision should be codified and put into the data base—details of subject, quality, intellectual level, sales history, seasonality, ties to other books through author and subject, and so forth. The software amounted to a toolbox of predictive tools. Despite the breadth of merchandising, the system was soon doing 70 percent of the buys, and that number was rising.

Behind all this was an idea as simple and as powerful, with the late twentieth-century decline in information-capture and -processing costs, as Henry Ford's notion of 'any color the customer wants so long as it is black' had been earlier in the century (Nevins, 1954). Shelf space appeared to be the bookseller's main commercial constraint. Unsold books could, after all, be sent back to

the publishers for an extended period if they remained in good condition and if the bookstore paid the freight and stood the packing and working capital costs. The Borders brothers thought they could 'make money selling one copy each of \$7.95 books' (late 1970s dollars—the reference is to new books at list prices) if they and their associates could use the shelf space efficiently by choosing the books intelligently and getting very good at knowing when they had chosen wrong. Doing this effectively involved complex considerations far beyond the powers of intuition of even the most gifted buyers. Systematic information about what sales to expect, with what temporal pattern, and systematic tools for analyzing these facts were of the greatest value. The ultimate constraint in their business model was buyer knowledge and decision-making capacity. Shelf space was most valuable when its owner had a good idea of what to put on it.

It naturally struck the Borders brothers that their expertise at getting the right books would be helped by shortening the fulfillment cycle time. They did what they could on that front without resorting to premium delivery services. They went from mailing the publishers typed-out order forms to submitting computer punch cards and began moving toward the bar code and phone-line communication of the late 1980s and 1990s. In all of this they were typically 2–3 years ahead of their competitors. But anticipating demand remained the innovation of central importance. By the time the software had a name—the Book Inventory System—it had absorbed a very substantial amount of retailing history, both aggregated and broken down by localities—and recognized 10,000 distinct subject categories.

DEVELOPMENT OF THE COMPANY

The Borders brothers were thus succeeding in delivering the service they wanted to, supporting an unusually broad inventory; and they were making money doing it. Few independent bookstores could do this, because few dealt with small and stable enough communities that the owners or buyers could personally know all the customers and their preferences. The Book Inventory System was the key to the Borders brothers' success.

The brothers wanted to propagate the consumer experience they were delivering—more people

should have access to good bookstores. They also wanted to make some money from the software asset they had created.

One possible way of doing this was to sell or lease the services of the Book Inventory System, customizing the data as appropriate. The more ambitious version of this which they found most attractive involved bundling the Book Inventory System with warehousing and supply chain management. But for any of these to be practical, the Borders brothers would also need to find interested and qualified booksellers who wanted the services. These did not have to be owners of established independent bookstores, though the brothers thought that many of these people might be interested. The brothers imagined there were many cities which could support their sort of store but had no substantial independent bookseller in place. The simple part of what was required to take advantage of the opportunity thus involved actual or potential control of an attractive site and the ability to mobilize enough in the way of capital and bank commitments for leases, fixtures, and inventory and other working capital needs (say, \$300,000 in all) in timely fashion.

Field research revealed that there were candidate store sites, though fewer obviously outstanding ones than the brothers had initially imagined. Independent bookstore owners with a drive to run a Borders-type store were scarcer still, unfortunately, and those among them who could raise the money required were a very small number. But even those initially showed real ambivalence about the Book Inventory System. Picking books was what they did. Knowing their customers was what they got paid for. To rely upon the Book Inventory System would be, they felt, to undermine the central sources of satisfaction in their work. The brothers found some customers. But they increasingly felt this was not where the money was.

So they turned, in the mid-1980s, to the other obvious approach to capitalizing the value of its software asset: they began expanding their own retail reach. The first new store was in Birmingham, Michigan, an upper middle-class suburb of Detroit; and this worked well. The next was in Atlanta, but the location was not good and the store did not do well. The next was in Indianapolis, and this was again a success. As this initiative proceeded and successes began to accumulate, running the business on a day-to-day

basis became more complex. At the same time, strategy was becoming more important. It became clear that some experienced managerial assistance was in order if they were to continue to expand, and Robert DiRomualdo, a prominent consumer goods retailing executive, was head-hunted in 1988. He threw himself into organization and expansion efforts. The successful stores were soon as far-flung from Ann Arbor as Philadelphia and as prominently sited as, in Philadelphia, roughly a block down the main shopping street letting onto Rittenhouse Square.

The store systems developed in ways quite distinct from the merchandise selection. The distribution infrastructure improved to the point that 90 percent of trade inventory arriving from publishers was processed in company-owned facilities within 48 hours for shipment to the stores. New stores were larger than they had been—now averaging nearly 28,000 square feet and on the order of 150,000 titles—and this offered great scope for the Book Inventory System. (Typical mall stores and independents were in the 3000–5000-square foot range, typically stocking 10,000–25,000 titles. But the mall stores, in particular, were selling convenience: they were not intended to be a destination.) The company also developed a distinctive, attractive, and inviting fixturing for the stores. Borders furnished the shelf areas with comfortable chairs for browsers as well as nooks for them to browse in.

The company hired (using a screening process which was unusually rigorous for the industry) and trained a store staff of young, well-educated employees who were interested in books. These employees were paid well relative to prevailing wages, were given a monthly book-buying credit in addition to their wages, and were given the opportunity to invest in the company unusually early in their term of employment. The level of their motivation was visibly very high.

Layout designers made it easy for customers to have the staff consult a data base about what books were in stock, what books were out of stock but on order, and what books could be special ordered. When the books were in stock, the staff member escorted the customer to the book and was instructed not to leave the scene before physically placing the book in the customer's hands. Buying remained centralized in Ann Arbor, but input was systematically solicited from the stores, and store-level staff had direct

and meaningful input into Book Inventory System forecasting exercises.

The stores also began to incorporate coffee bars and café tables at which potential customers could read or simply sit and talk with friends. An unusually broad selection of magazines and out-of-town (and even overseas) newspapers were kept in stock. Performance areas in which authors could make appearances and in which both they and local groups could give readings or concerts were set aside. The stores began to deploy a staff person to manage the calendar of such events full time. This was particularly important for generating traffic in a business that had traditionally been highly seasonal, with most of the profits traditionally being made in the fourth quarter of the year. In addition, store hours increased. Monday-through-Saturday hours of 9 a.m. to 11 p.m. and Sunday hours from 9 a.m. to 9 p.m. were standard. In the Rittenhouse Square neighborhood, for example, this made the store the late-evening and lazy Sunday destination of choice.

These initiatives complemented one another and, equally, the unusually diverse selection of titles. In terms of broad categories, the merchandising was more valuable for the investment in staffing and sales routines, coffee bars and ancillary activities to draw the right sort of potential customers into the stores, and layout, furniture, and fixturing designed to encourage such individuals to start reading books they might want to buy. The same was true in all permutations. The stores became a shopping destination, even for potential customers who might respond well to the selection but would not have sought it out. Revenues rose, comparable-store sales rose smartly, and profitability improved.

BARNES & NOBLE

Leonard Riggio came to New York University as a night school undergraduate in the mid-1960s. He took a day job in the campus bookstore to pay his bills. He started at the university as an engineering major but soon shifted over to business. His time at the campus bookstore was equally focused and brisk. He began in an entry-level job, was promoted rapidly, and within several years had become merchandise manager.

College bookstores at that time were generally owned and operated by their school. The basic

mission was the timely provision of textbooks. Profit was not a primary consideration; nor was the breadth or even the intellectual excitement in the nontextbook book offerings; nor was the usefulness or attractiveness to the customers of the nonbook offerings. The whole bookstore operation was generally understood to be a support function for the specific academic programs of the institution, not the provision of service to the customers who bought the books or anything else. It was not very much like retailing.

Riggio increasingly felt that he would do things differently, and better, were he running the store. He had two main ideas. The first was that a higher level of service would generate both customer loyalty and improved sales. As a slogan, this came down to 'Put the book into the student's hands,' which seemed radical enough; but Riggio could see that it had much broader implications—for the selection of books to be offered, the ways in which they were displayed, the speed and effort with which special orders were to be pursued, and for many other aspects of operations. The other idea was that fast cashiering was also desirable: both the student and the store would be better off if paying for the book involved minimal delays. It seemed to Riggio that traditional college bookstore methods offered an easy commercial target.

The undergraduate engineer was morphing into the dropout entrepreneur. In 1965, Riggio borrowed the \$5000 he needed to get started. He had to scrape to find it—some came from credit cards, some from relatives, some even from Household Finance. His initial venture was a textbook store just off the campus on Waverly Place. The location was good, his ideas were well received, and he managed the store aggressively. He tried to know the regular customers by name. He cashed checks. He monitored the shelf inventory personally. He would drive in his station wagon to make pickups from New York area distributors when necessary. Occasionally, when a book was needed urgently and was unavailable in the channels, he would buy it retail from a competitor and take whatever margin he could get. The clientele liked what the store delivered, and the store prospered.

Riggio was ambitious, and he looked for a way to grow. He took on other college bookstores in the New York area and succeeded in making them profitable. The margins on the books were

generally fixed and the usual lease terms involved a fixed percentage of sales going to the institution. So he focused his attention elsewhere. Payroll usually bulked large among the other expenses. Much of the money was typically spent on record keeping, buying, and other administrative activities he could more cheaply centralize. Increasingly, he also thought about how the floorspace was being used. The margins on clothing, cosmetics, and even used textbooks were more attractive than those on new books. Incremental changes paid off handsomely. He took on more and more college stores, farther and farther afield; but he began to look for something more than incremental expansion through contracts to run other people's stores.

An opportunity soon presented itself. The earliest predecessor to Barnes & Noble, Inc. had begun doing business in 1874. By the 1960s, it had interests in many branches of the book trade but derived most of its revenue from textbook sales. Its main retail venue was a large store and storage space on the east side of Fifth Avenue at 18th Street, about three-quarters of a mile north of Riggio's store and the NYU neighborhood on the way to midtown. But the firm had fallen on evil days. When John Barnes died in 1969, no other family members were available to take the company on; and its retail and wholesale businesses were sold to Amtel, a retailing conglomerate. By 1971, however, Amtel had concluded that the business as well as the family was in long-term decline and put it on the block. This seemed like a major opportunity, and Riggio again borrowed money. The 29-year-old bought the floundering company in 1971 for \$1.2 million.

The Fifth Avenue store certainly enhanced Riggio's textbook business, but he was beginning to have bigger ideas still; and he now had 42,000 square feet of store and storage space in the world's most central business district to play with. He kept on with the college stores. He began, taking advantage of the Barnes & Noble legacy, a wholesale operation, buying used books on nearly 150 campuses for resale. But chiefly he began to focus on retailing.

Riggio had a concept for his retailing initiative: the store would sell education as well as (if not indeed more than) entertainment. Merchandising of popular nonfiction and how-to books expanded radically relative to the trade stores of the day. He stocked relatively little fiction in hardcover

and all of that heavily discounted to draw in customers. There was generous merchandising of discount paperbacks, but the discounts were much smaller. The location was accessible and the store organization helpful to the unaccompanied customer—the usual broad categories were broken down into many more signed subcategories. Customers responded well to the new approach.

Starting in 1972, a more radical innovation took shape. Riggio leased increasingly large spaces across Fifth Avenue from the main store—at one stage in excess of (an incremental) 40,000 square feet—and devoted them single-mindedly to off-price sales. The recently published books were sold at heavy discounts, the remainders and used books even cheaper. The range ran from 40 percent to 90 percent. 'If you paid full price,' the advertisements ran, 'you didn't get it at Barnes & Noble.' The space was large, the stock immense, and the spirit that of a supermarket. Best-seller lists in effect advertised sales. Shopping carts were available on the way in. 'Pile 'em high and let 'em fly' was a motto.

Riggio was more formal in tone speaking to a reporter for the main bookselling trade paper in 1976 but the same spirit shows through:

These are everyday people who have shopping behaviors similar to people we see in shopping centers across the country. The best way to reach them is by everyday sound merchandising. We've taken the stuffiness out of a bookstore... [and] give customers a feeling that they are being treated as customers, not as potential scholars. (Freilich, 1976: 72)

Many of the customers in the Annex and in all bookstores, the article went on quoting him,

have no intention of reading the books they buy. They buy them as shelf fillers, in order to project images of themselves through their collections. We see people returning week after week to the Annex and buying 10–15 books... (Freilich, 1976: 73)

It must be said that the books did sell.

The company began opening branches. Some were specifically modeled after the Sales Annex, others were general trade bookstores. All were in the Northeast, and all sold all their books at a discount. Best-sellers and selected advertised titles were offered at 33 percent off, the other hardcovers were for sale at 15 percent. Selected pa-

perbacks were offered at 20 percent and the rest went at 10 percent.

By 1986, there were 33 of these stores, mostly in the Northeast. The company's ability to market remainders had been enhanced by its early acquisition of Marlboro Books, a remainder and mail-order house. The college division had continued to flourish and by now had contracts on 142 campuses. The company had also added a division servicing 153 book departments in drug stores and supermarkets, a rack-jobbing business for mass-market paperbacks.

At that time, there were two major national chains of bookstores (with well in excess of 1000 outlets between them) and a number of regional chains. The national chains were owned by department store holding companies—Waldenbooks by Los Angeles-based Carter-Hawley-Hale and B. Dalton by Minneapolis-based Dayton-Hudson—and had gotten big riding the growth of suburban malls (in which department stores were generally anchor tenants) and the growing population of educated, relatively affluent people. The chain bookstores averaged in the 3000–4000-square foot range, stocking roughly 30,000 titles (including magazines) on average. The mall stores were originally able to exploit the mall foot traffic and to price for convenience rather than having to use price to attract customers. Business had, between this fact and the demographics, boomed in the 1970s. But the national chains could not be insensitive to their competitive environment; and as the regional chains—many of which were discount houses—grew, pricing pressure increased. The summer of 1985 was bad, the Christmas season of 1985 and the winter of 1986 brutal. Revenues and gross margins suffered badly. Only companies which were organized for this sort of competition had any chance of surviving.

Late in 1986, Dayton-Hudson concluded that the growth prospects of B. Dalton division were not adequate under its own management and decided to shop it. Riggio felt like the Pac-Man as he contemplated adding a national network of 798 stores which had grossed \$538 million the previous year to his \$225 million company, but it seemed to him that the next step up for his company was clearly to go national. One of the two national companies was for sale and he became determined to bid. The key financing was raised from a Dutch retailer, Vendex, which

owned a shareholding in Barnes & Noble and trusted Riggio implicitly. There was competition for the property, but Riggio returned to New York with the deal.

Becoming a national retailer in name was the easy part. Many aspects of running a business so much larger than it had been were initially challenging to his management team, and it was 2–3 years before the learning tapered off. The scale of operations magnified the costs of mistakes, when they happened, and the inevitable occasional simple bad luck. There was more. For example, real estate operations in general and the evolving economics of mall leasing in particular were unfamiliar and early sources of difficulty. As the Barnes & Noble executives mastered the problems, however, performance improved. Many Dalton back-office functions were ultimately relocated to New York and were reengineered in the process. Scale economies were enhanced and absolute headcounts fell. Indeed, there was, overall, a steady focus on centralization and economies of scale—in distribution infrastructure, buyer expenses, terms on the stock, and advertising as well as in financial and administrative functions—wherever they could be found.

The Dalton inventory management software was better than what Barnes & Noble had, and it was far better suited to a network so much larger and inevitably more complex. But it was still relatively crude. The Dalton system had been introduced in 1966 and had been often modified but never rewritten or superseded. It was a model stock system with automatic reordering. The buyers, with some limited input from store managers regarding best-sellers and regional titles, chose the books and set the models, just as they always had. The software could generate statistics—for individual titles and for roughly 100 categories, it could report total sales and sales by individual stores, and by stores sorted into six broad groups by annual sales, and overall. But it had no forecasting capability. Overall, the system was basically one of static equilibrium with sporadic—and analytically essentially unassisted—human interventions. In a striking contrast to the Borders view, one buying executive told *Publishers Weekly* that at Dalton, '[i]t is the buyers who make the computer a valuable tool' (Maryles, 1977: 126).

Oddly enough, the increasing size of the company relative to the other customers of publishers

did not have massive direct effects on the prices it paid for books—the discount schedules topped out at order numbers which were small relative to the company's orders for, say, national best-sellers. But there were other possibilities for accommodation. A very large customer could get away with paying more slowly than a smaller one could. There were also shadowy areas in returns—the trade privilege concerned books which were not shopworn or otherwise damaged, and perhaps the books the chains shipped back were not scrutinized so carefully. Perhaps invoice disputes were settled more amicably or at least in a fashion less costly in terms of time and direct expense. Cooperative advertising funds (i.e., funds for advertising both the book and the place to buy it) may have been available on easier terms.

The company's basic competitive thrust continued to be selling off-price books and discounting, and there could be no doubt it was better placed to pursue this after the acquisition than it had been before. Competition, on the other hand, was heating up. Crown Books was especially worrying. The regional chain had started in Washington, DC in the late 1970s. It was run by a Harvard Business School-educated son of a family that owned a successful drug store chain. Crown sold a narrow selection of books at sharp discounts in 3000–6000-square foot outlets with no-frills fixturing sited in shopping malls. This made it difficult for competing chains, never mind independents, to profitably stock slow-moving titles and indeed, any titles being ordered in one's, two's, and three's.

Crown clearly aspired to a national expansion and had become a notable source of pressure on B. Dalton's pricing and profits prior to the sale. Crown's eyes at one point settled on Bookstop, another regional firm (at that stage operating in Texas, Florida, and California). The Bookstop stores were even larger, at 9000–10,000 square feet; but that was not by itself the most interesting thing about them. The Bookstop entrepreneurs had the idea that they could use their space (and so much space) most efficiently if they developed a clear customer base and knew what those customers wanted. So they offered all their books at 10 percent off, but offered another 10 percent to 'members.' Membership cost \$7 and involved showing a membership card at the sales register in a way that enabled Bookstop to track the

member's interests. The software was unsophisticated—and in the event, the information was used for little more than compiling mailing lists and candidate expansion sites—but the concept was a step up on Dalton's. Crown's interest in Bookstop (in which it already owned a 20 percent stake) became pronounced. Riggio got on an airplane to Texas with a lawyer saying that he wasn't coming home until he'd bought the company. He stayed until he prevailed.

The puzzle to the trade in all of this was how operators could profitably fill the shelves of such large (and larger and larger) stores in the suburbs. Barnes & Noble had discovered surprisingly large appetites for information, for cheap best-sellers, and just for cheap books. They now found that the more people were offered, the more they wanted. People came and bought. Even special orders went up distinctly, albeit less than proportionately to revenue.

The ambience of these stores was not upmarket, however, and certainly not reminiscent of an independent bookstore. The merchandising was not designed to cater to scholarly or at that time even particularly to literary tastes. The prime virtue of inventory, from management's perspective, was that it sell quickly. The person at the register ran the register, and was selected because he or she had seemed likely to be good at it.

As time passed, there were some marginal adjustments to the approach. Riggio acquired the trade name, hallowed in American literary history, of Scribner's; he also bought the Doubleday trade name and the small chain of stores that came with it. The point of both purchases was to have a wider variety of brands to offer upscale mall developers.

The industry changed significantly over the course of the 1980s. The chains had expanded, roughly doubling the number of their outlets. Many independents had folded as the malls continued to divert Main Street traffic, though mall growth subsequently slowed. Department stores had virtually abandoned the bookselling field. But the biggest change from Barnes & Noble's perspective came in 1989, when the company first built free-standing stores comparable in size to the new, large Borders stores.

The Barnes & Noble business model was different from that of Borders, however. It was a Ferrari shell, unkind industry commentators said, with a VW engine. Barnes & Noble sought to

have a large selection but still had no sophisticated software for customizing it to local populations and to the ebbs and flows of their tastes. The staff were neither selected, trained, nor motivated to interact with customers as the Borders staff were. There was wood paneling in the stores; there were chairs; and there was coffee. The stores were a place where customers wanting to forget about the world for a little while could stay. Discounts on backlist titles eased. But the primary allure remained the advertised prices and the high-volume items—these were critical, in Riggio's view, to building traffic.

Hardcovers were offered at a minimum of 10 percent off list price, best-sellers at 30 percent off. (The chain's costs were still relatively low—the old reasons remained, and they were a larger customer now.) Barnes & Noble superstores offered much larger selections than independents and mall-based bookstores, but the merchandising still tended, relative to Borders, to mass market items. The company also kept substantial inventories of individual items relative to Borders. Much more floor space was devoted to very heavily discounted—though to the bookseller disproportionately inexpensive—publishers' overstocks. Barnes & Noble also published and sold out-of-copyright classics and reference works, in attractive hardcover editions, under its own imprint. The target was 10 percent of sales. Again, these were cheap to stock, in this case because the content was free and the incremental cost of the hardcover binding was in fact small. The books could be priced very inexpensively compared to recently published works and still be priced very profitably. All in all, Barnes & Noble continued to seek its profits from low costs and high volume.

Barnes & Noble was large and ambitious, potentially a force to be reckoned with. Riggio opened eight superstores the first year, 27 the next, 58 the year after. There was no sign of stopping—he clearly envisaged a major shift and a very large chain of superstores. The collision came when Barnes & Noble set out aggressively to lease precisely the sort of sites Borders sought.

STABILITY OF A SORT

The growing geographical diffusion of the superstore model represented a major change in Amer-

ican book retailing. But the increasing administrative burdens and the necessity of fully national scale if a contest with Barnes & Noble was truly in prospect made the Borders brothers' work at Borders, Inc. increasingly different, and more burdensome, than it had been. This time, the new life looked less attractive. In 1992, the Borders brothers prepared for a public offering but then sold the company, on attractive terms, to Kmart Corporation, a national retailing company headquartered in the Detroit suburb of Troy, Michigan. Kmart had previously purchased Waldenbooks, the other predominantly mall-based chain of traditionally sized, -merchandised, and -managed bookstores besides B. Dalton; but the Kmart managers had begun to think that the future lay in a different approach. Despite the Borders growth, it certainly remained different: according to the public offering document, sales of hardcover best-sellers remained a strikingly small percentage of company retail sales in fiscal 1991 (Borders, 1992).

Barnes & Noble attempted an initial public offering of stock in 1992 but withdrew it when investors seemed uneasy about the company's debt levels and the prospects of the superstore model. The following year saw steady expansion of the superstore business and sales per square foot. The trend in average ticket size numbers also pleased the analysts. The company said it expected half its revenue to come from the new model stores by the end of the following fiscal year, and the transaction went ahead successfully in 1993. The 1993 prospectus indicated that Barnes & Noble had developed a proprietary inventory management information system. The system still (see Appendix 2) had much more limited functionality than the Borders system, but Borders-style functionality was not at the heart of the business model the prospectus described.

In 1995, Kmart sold its bookselling operations to a group of divisional executives. The new company then conducted its own IPO to raise capital to operate as an independent company on a national scale.

In 1996, i.e., once the IPOs were done, Barnes & Noble operated 431 superstores and the Borders Group 157. The Annual Reports gave total sales of \$2.45 billion and \$1.96 billion respectively. (Note that these numbers include mall chains and other sources as well as the superstores. But most of the features of the busi-

ness models under discussion would have had some spillover effects.) Barnes & Noble had a higher stock turn, but the ratio of net earnings to total revenue was twice as high at Borders. Both firms discounted many new books, and each earned handsome margins on its café sales. But the basic shopping experience in the two sets of stores remained differentiated roughly as it had been (see Appendix 3). The models were, after all, continuing to work. Indeed, in 1996 Barnes & Noble commanded a share of the market for all bookstores (including trade, college, religious, and chain store sales) of 19.5 percent and Borders 15.6 percent, for a total between the two superstore groups of 35.1. The year before, the total had been 32.1. The year after, it would be 40.3.

DISCUSSION

The superstores are all very different from the mall stores as these existed and from most of the independents. As a group, in this contrast, they seem very much the same. They were large and often free-standing. They were inviting places to tarry and read, not, apparently, mere venues for sales. Their assortments were, relatively speaking, overwhelmingly broad. They sold best-sellers, and some other books, at substantial discounts. They offered ancillary services, such as cafés, and ancillary activities, such as readings and discussion groups.

Yet behind these similarities—beneath the surface of the stores—the two chains represented quite different approaches to retailing and required quite different capabilities. The focus of Borders was on assortment; and software to optimize this was at the heart of the business. Barnes & Noble's focus was on price and thus on infrastructure and practices to promote volume. These two chains' capabilities originated and developed in distinctive ways, the one oriented around information and the other more directly reaching for scale. Ambitions may have preceded capabilities, but the capabilities preceded, and seem to have driven, actual strategies: the original differences were still visible a decade later. To the extent that the strategies ultimately converged to any significant extent, that convergence happened only incrementally and relatively late in the day. This was an equilibrium in which the superficial homogeneity disguised variety under the skin.

The Borders history lends itself easily to interpretation in terms of the resource-based view of the firm. To reiterate, the important fact about the company that emerges from the history given here is not that it sold books or that it offered a wide variety of books in large and handsome or well-sited stores, and still less that the core of its retail capability lay in a base of sales skills in its staff. The core of its capability was, rather, software and an evolving statistical history of local purchases. The company made money by leveraging the software—in effect, by selling software services. The resistance of many independent bookstore owners to buying the services is only one of the many details lending credence to this interpretation. (Indeed, my colleague Sidney Winter remarked, the resistance of the independents seems to underscore the point that the unavailability of the requisite information technology was not the sole consideration in the way of a Borders-type innovator.)

Much of the Borders history concerns the development of routines and capabilities complementary to the software. The instructions to the floor staff about what to do after looking up book information in the computer data base is a very direct example, but the employment of people to schedule school poetry readings and the like is not far off. Post Milgrom and Roberts (1990), this pattern seems only natural. In the history as I have recounted it, the company was dazzlingly effective at accessing complementary assets. The difficulty with most of them lay less in creating them than in thinking of them. This observation emphasizes the value retailing perspective which DiRomualdo brought to the firm's management. It may be an example of the constraining effects of established routines.

On the other hand, the idea that powerful complementarities inevitably drive organizational inertia seems, on this account, overdrawn. The complementarities in the ultimate system may indeed be robust. But that system emerged only over time, a consequence of a series of decisions made in specific contexts—a series of incremental adaptations and changes. It is evident by example that the company did not take the only possible profitable path.

One could dynamize this resource-based view of Borders by developing the evolutionary perspective on its history more explicitly. One can discern in the basic business five distinct activities

routines for executing which can have powerful interconnections and complementarities. These activities are organizing the book stock (both the process and the resulting physical pattern), tracking the inventory, estimating demand at the level of titles, ordering new stock, and fulfilling the orders. There was a widely diffused set of routines to carry out these functions. The Borders firm was an innovator, initially with a valuable new idea about how to track the inventory. The crudest initial version was facilitated by recent improvements in information technology, and the idea's full flowering was supported by information technology's subsequent development. The innovation regarding inventory extended easily into an innovation in demand estimation and into ordering. These raised the rewards for innovating in stock organization as well. All these made the costs and constraints imposed by the traditional approach to fulfillment even more apparent, so the innovator took that on as well.

There are a number of salient features in this account. The complementarities are powerful when the system is static and sometimes of even greater value when the system is itself changed: in this case, the value of the (historically) later innovations depends on the implementation of earlier ones. The constantly accumulating sales history enhances the value of all of them. The underlying innovations are all basically informational and replication emerges as the preferred strategy for appropriating their value. The diffusion of the superior technique puts market pressure on the stalwarts of the old technique and is a major force in their decline. But the superior technique does not diffuse by imitation and free entry. The genes, to put matters back into evolutionary perspective, descend because the mutations embodying them survive and flourish.

Barnes & Noble represents a different mutation (albeit one with a somewhat similar phenotype). Its superstores arose from different preconditions, rooted in far more traditional retailing economics; and in the company's development, it faced a different set of problems. That the solutions which emerged and the complementarities which were ultimately exploited were different should not be surprising. Yet there were powerful and persistent complementarities; and their value only grew over time. As the sales history record grows richer, it is not surprising that merchandising grows somewhat broader; but it is equally unsur-

prising, given the complementarities, that convergence remains incomplete. Scale economies being at the core of Barnes & Noble's approach, the company's replication strategy does not seem odd. The diffusion of its technique in the population puts a different pressure on the independents—not only can potential customers purchase relatively esoteric books at Borders rather than having to order them, but the customers can purchase popular titles cheaply due to Barnes & Noble. The independents, whose fixed costs are more of a burden to them than the chains' were, cannot fight back effectively.

In all of this, one sees familiar (Nelson, 1991) themes. The market imposes only loose constraints: profitable firms in a given industry can differ in performance-relevant ways. These differences arise partly from free new choices but partly from past choices, that is, from the firm's history. When firms do choose, they do not necessarily know all the alternatives which will emerge, never mind the consequences of the particular alternatives before them. Core capabilities seem to be very persistent (though whether the costs of changing them are direct or opportunity costs is less clear). Firms which are wise, or lucky, in the capabilities they develop relative to the competitive environment in which they do and will operate prosper.

In this fashion did a new format for bookselling emerge. Not long after this paper's narrative ends, there was a new evolutionary event: the rise of Amazon.com. (Sahlman and Katz, 1999). That and its sequellae represent a related subject. But it is a complex one, requiring a careful treatment of its own.

ACKNOWLEDGEMENTS

The original version of this essay was presented at the CCC/Tuck Conference on the Evolution of Firm Capabilities in Hanover NH, September 25–26, 1999. I thank the Wharton School's Reginald Jones Center, Center for Leadership Studies, and Emerging Technologies Program and the NBER/Sloan Foundation Program in Industrial Technology and Productivity for research support. I am grateful to a large number of industry participants and commentators for their candid thoughts and reflections. (Most of these interviews were conducted in confidence and are therefore

not cited directly in the text. The interview notes will be deposited in the Archives of the University of Pennsylvania Library with access available to qualified scholars.) My academic colleagues George Day, Constance Helfat, Daniel Levinthal, Keith Pavitt, Sidney Winter, and the late Zvi Griliches gave many helpful comments. The discussions with Helfat and Winter were especially sustained, penetrating, and influential in my thinking. Jay Haverty and Wendy Tao gave excellent research assistance. I alone am responsible for the content.

REFERENCES

- Barney J. 1986. Strategic factor markets: expectations, luck, and business strategy. *Management Science* **32**: 1231–1241.
- Barney J. 1991. Firm resources and sustained competitive advantage. *Journal of Management* **17**: 99–120.
- Borders, Inc.. 1992. (August 12) Form S-1 Registration Statement. Securities and Exchange Commission: Washington, DC..
- Brown S. 1997. *Revolution at the Checkout Counter: The Explosion of the Bar Code*. Harvard University Press: Cambridge, MA.
- Freilich L. 1976. Barnes and Noble: the book superstore—of course, of course. *Publishers Weekly* 19 January: 71–73.
- Hower R. 1943. *History of Macys of New York 1858–1919: Chapters in the Evolution of the Department Store*. Harvard University Press: Cambridge, MA.
- Maryles D. 1977. B. Dalton, with 350 outlets due by 1979, views its bookselling future with rosy optimism. *Publishers Weekly* 19 September: 126–129.
- Milgrom P, Roberts J. 1990. The economics of modern manufacturing. *American Economic Review* **80**: 511–528.
- Nelson R. 1991. Why do firms differ, and how does it matter? *Strategic Management Journal*, Winter Special Issue **12**: 61–74.
- Nelson R, Winter S. 1982. *An Evolutionary Theory of Economic Growth*. Harvard University Press: Cambridge, MA.
- Nevins A. 1954. *Ford: The Times, the Man, the Company*. Scribner's: New York.
- Peteraf M. 1993. The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal* **14**(3): 179–191.
- Sahlman W, Katz L. 1999. Amazon.com: going public. Harvard Business School Publishing Case 899003.
- Tebbel J. 1972. *A History of Book Publishing in the United States, I: The Creation of an Industry 1630–1865*. Bowker: New York.
- Wernerfelt B. 1984. A resource-based view of the firm. *Strategic Management Journal* **5**(2): 171–180.

APPENDIX 1: 1971–72 BOOK TRADE DIRECTORY (EXCERPT)

Lists of Publishers and Booksellers

Helaine MacKeigan, Editor
(Bowker: New York)

Ann Arbor—67,340. Area code 313

Blue Front Store, 701 Packard St. (48104)

Paperbacks

Ray E. Collins, owner

Centicore Bookshop, 336 Maynard St. (48108)

General

665–2604

(Br: 1229 S. University Ave. (48104))

P.M. Wyman, mgr.

art, for lang (fr, ger, rus, sp), hb, juv, papbks, scholarly

art sup, frames, graphic art, prints

Circle Bookshop, Inc., 215 S State St. (48108)

Metaphysical

769–1583

R. S. Erlwine & J. C. Sullivan, owners

hb, papbks (hp), meta (occult, astrology, eastern rel, mysticism)

Concordia Lutheran Jr. College Book-Store, 4090 Geddes Rd. (48105) College

Myrtle Schafter, mgr.

Follett's Michigan Book Store, 322 S State St. (48108)

College-General

662–6594

- Follett Corp., Chicago, owner; Robert F. Graham, mgr.
 hb, papbks, text-c
 coll. sup
 Hadcock Music House, 314 S Thayer, Box 1267 (48106) Special
 E. Hadcock, owner
 hb, mus, papbks, text-c
 Logos Bookstore, 611 Church St. (48104) Religion
 661-4563
 Inter-Varsity Christian Fellowship, owner
 Jim Carlson, mgr. & buyer
 hb, juv, papbks, rel-c, p, rental
 ch & SS sup, gifts, gr CDs, rel per, rec
 Bob Marshall's Book Shop, 211 S State St. (48108) General
 663-5624
 Robert F. Marshall, owner; Rose Marion Blake, mgr; Donald Wilcox,
 buyer
 art, hb, juv, papbks, rel-c, j, p
 Overbeck Bookstore, 1216 S University Ave. (48104) College
 663-9333
 E. C. Overbeck, owner
 hb, juv, law, med
 staty
 Slater's, Inc., 336 S State St. (48108) College General
 662-4543
 Florence C. Slater, owner; George Coons, mgr; Dean McLaughlin,
 buyer;
 Winifred Martin, juv. buyer
 hb, juv, papbks, text-c
 art & col sup, per staty
 Student Book Service, 1215 S University Ave. (48104) College General
 761-0700
 Fred Shure, owner
 art, for lang, hb, papbks
 col sup
 Ulrich's Book Store, 549 E University Ave. (48104) College General
 NO 2-3201
 Fred Ulrich, owner; Ernie Bundy, Howard Baker & D. O. Brown,
 buyers;
 Martha Jump, juv buyer
 hb, juv, med, papbks, text-c, s
 art & col sup
 Wahr's University Book Store, 316 S. State St. (48108) College
 662-5669.
 Leo E. Hallen, mgr.

APPENDIX 2: EXCERPT FROM 'PROSPECTUS: 8,235,000 SHARES, BARNES AND NOBLE INC.,' (SEPTEMBER 27, 1993)

Strategy: Business:

Completing Installation of Proprietary Inventory Management Information System. The Company has developed a proprietary inventory management information system, WINGS, which the Company believes increases store productivity by allowing for increased operating efficiency and improved customer service. WINGS provides bookselling personnel with on-line inventory information regarding in-stock availability and shelf location. WINGS enables store personnel to (i) place book orders directly with wholesalers through direct electronic data interchanges, allowing customization of inventory and efficient restocking of fast-selling titles, (ii) provide convenient and efficient service for customers with special requests or orders, and (iii) increase the speed and accuracy of receiving merchandise and processing returns and point-of-sale transactions. WINGS is currently used by the Company in all of its superstores and approximately 100 of its mall bookstores, with installation in its other mall stores to be completed during 1994.

APPENDIX 3: SUPERSTORES ON THE MAIN LINE: NOVEMBER, 1999

Borders and Barnes & Noble operate superstores on Philadelphia's Main Line six-tenths of a mile apart in Bryn Mawr, Pennsylvania. The following observations from a site visit one evening in early November, 1999, speak to the point in the text.

There were two distinctive features to the areas near the stores' entrances. The first concerned the displays of newly published books. The numbers broke down as follows.

	Borders	Barnes & Noble
Total titles:	541	270
of which:		
Non-fiction:	297	42
Biography:	65	37
Fiction:	179	191

The Barnes & Noble fiction section included significantly more mysteries and upmarket romances (e.g., Danielle Steele).

Equally striking was the amount (and proportion) of floor space devoted to remaindered books. Barnes & Noble devoted roughly five times the space to this that Borders did. The floor space was on the main floor, adjacent to the newly published books, the cash registers, and one of the two doors. This is prime territory.

The number of volumes in the general fiction shelves may be proxied by the offerings for writers with surnames beginning with a single letter of the alphabet. The selections under the letter 'M' had the following features.

	Borders	Barnes & Noble
Total volumes	1056	1153
Duplicates	173	453
Distinct titles	883	700

A more detailed look at a nonfiction category highlighted the differences. Under ‘German History’ the following could be observed.

	Borders	Barnes & Noble
Total volumes:	195	106
Distinct titles:	186	81
Hardcover titles	40	19

(The hardcover titles tend to be more current. All features of this table are robust to the exclusion of coffee table books about Hitler, the Second World War, etc.)

Given these facts, it is perhaps not surprising that Borders had twice as many computer terminals—offering shelf locations for books in the store, in-stock positions for all their local stores and distribution centers, and ordering information for books not in stock in any of these—than Barnes & Noble did.