1-1-1994

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INTERNATIONAL HUMAN RESOURCE STRATEGY and ITS DETERMINANTS:

THE CASE OF MULTINATIONALS and THEIR SUBSIDIARIES IN TAIWAN

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ABSTRACT

This introductory investigation into the human resource implications associated with the tensions between integration and responsiveness studied the concept of International Human Resource (IHR) Strategy; its dimensions and its determinants. To accomplish this, Jarillo and Martinez's (1990) parent--subsidiary business strategy framework was recast in an IHR strategy setting. Then, the relationships between a set of interorganizational interdependency determinants and the dimensions of IHR strategy that emerged, global integration and local responsiveness, were empirically tested. Data from 100 subsidiaries and their parents highlighted several informative associations between interorganizational dependencies (dependence on parent's resources, dependence on local resources, dependence on host institutions) and the IHR strategies.

INTRODUCTION AND SUMMARY

Strategic international human resource management has come to the forefront as one of the newest subfields of human resource management over the course of the last decade (Adler and Ghadar, 1989; Dowling and Schuler, 1990; Doz and Prahalad, 1986; Milliman, Von Glinow, and Nathan, 1991; Pucik, 1984; Schuler, Dowling, and De Cieri, 1993). Most recently, the focus of this stream of inquiry has been on how HRM policies and practices "fit" into the corporation's overall international strategic management process. Given the embryonic stage of this research, it is not altogether surprising that much of the work on this topic has tended to be conceptual, often focusing on the strategic business issues that the headquarters of multinationals (MNCs) face. The adoption of and reliance on various types of control systems is but one example. To date, however, the specific international human resource management strategies of MNCs and their subsidiaries, and the determinants of these strategies, have garnered far less attention.

Therefore, it is evident that there is a need to develop a framework to classify different International Human Resource (IHR) Strategies and to empirically examine the determinants of these IHR strategies at the subsidiary level. It will, of course, be imperative to keep in mind that multinationals often consist of a group of geographically dispersed and goal-disparate organizations (including the headquarters, domestic operations, and various foreign subsidiaries). Moreover, a MNC's interorganizational network is also embedded in an external network consisting of all other organizations, including its customers, suppliers, regulators, and other stakeholders. It is, essentially, a diverse and dispersed array of entities with which the different business units of the multinational must interact (Ghoshal and Bartlett, 1990).

In light of these tensions, it appears that when MNCs set IHR strategies, they need to perform a delicate balancing act; striving for consistency in the way they manage people, while at the same time adapting to the business practices and mores of each different country they operate in (Adler, 1986; Laurent, 1986; Schneider, 1988; Sheth and Eshghi, 1989). Dowling (1989) suggests that one solution for coping with this quandary is to use different HR approaches for different subsidiaries. He found that almost half the MNCs he surveyed did this.

A growing number of observers have touched upon the determinants of IHR strategy (Dyer, 1984; Tichy, Fombrun and Devanna, 1982; Bamberger and Phillips, 1991). A review of this literature suggests that the two most frequently discussed factors are the foreign environment that the firm is operating in and the overall business strategy of the firm (Fombrun, 1982; Dyer, 1984; DeBejar and Milkovich, 1986). In addition, in the MNC--subsidiary setting, some scholars posit that product life cycles (Adler and Ghadar, 1989), organizational life cycles (Milliman, Von Glinow, and Nathan, 1991), and cultural differences (Schneider, 1988; Laurent, 1986) drive overall business strategies, which in turn affect IHR strategies.

Recall that some envision the MNC as fitting into a far reaching interorganizational network (Ghoshal and Bartlett, 1990). Much the same as their parent's, subsidiaries of MNCs operate in far reaching external networks, too. Undoubtedly, these interdependencies with other organizations and environments have important implications for HR strategies (Pucik and Katz, 1986; Wright and McMahan, 1992). Evans (1986), for example, asserts that, "The choice of a geocentric or polycentric approach to HRM is not dictated by product-market or industry logic; each approach represents a different way of coping with the different sociocultural environments of a MNC." Baliga and Jaeger (1984) also propose that the degree of interdependence between a MNC's headquarters and its subsidiary is the most crucial factor that influences the degree of delegation to the subsidiary and the types of HRM controls imposed by MNCs to monitor and regulate their subsidiaries.

Given this, there appears to be a need for an empirical investigation into the influence that the parent and other institutions embedded in the environment in which the subsidiary resides have on IHR strategy. In essence, it is the relationship between these institutions and two dimensions of IHR strategy, global integration and local responsiveness, that needs attention. Accordingly, this paper begins by calling on the business strategy and HR literature to develop a framework for classifying IHR strategy at the subsidiary level. Then, it develops and analyzes the aforementioned determinants of IHR strategy. We close by stating our conclusions and the implications for future research.

INTERNATIONAL HUMAN RESOURCE STRATEGY

The Global Integration--Local Responsiveness (GI-LR) Framework

Of late, the prevailing conceptualization for examining strategy in the international context has been the global integration--local responsiveness ("IR grid") framework and its offshoots (see Table 1). Arguably, this conceptualization has its roots in the early works of Lawrence and Lorsch (1969),Thompson (1967), and, more recently, Porter (1986). In any event, the underlying basis for the IR scheme is managerial perceptions of the environment along two basic imperatives; the incentives and pressures for global integration (consistency or standardization), and the incentives and pressures for local responsiveness (customization or adaptation). For any given business, the pressures for globalization are those forces that foster uniform worldwide business resource deployments for strategic pursuits. Of course, strategists make decisions to optimize the resources of the collective organization, sometimes resulting in activities being integrated across national boundaries. In contrast, localization pressures are industry forces that encourage local, context-sensitive strategic decisions and practices. When responding to local pressures, management must respond predominantly to each local market or industry setting, irrespective of the strategic implications for the parent or sister business units (Prahalad and Doz, 1987).

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One might apply the GI-LR framework to analyze these two pressures by thinking in terms of the costs and benefits of responding to each (Ghoshal, 1987). Thus, this framework is useful for assessing the relative strength of the global integration and local responsiveness pressures across many levels: across industries, across firms competing within industries, or even across functional (or task) levels within an organization.

Likewise, it certainly appears that this framework could be useful for capturing the competing pressures (globalization and localization) that impact IHR strategy. Before exploring the concept of IHR strategy, however, we need to address two questions. First, recasting a question posed by Adler and Jelinek (1986), "Is HRM necessarily culture bound?" Second, "Is there a competitive advantage to be derived from a global IHR strategy?" To the former inquiry, conventional wisdom says, somewhat. To the latter, however, Adler (1986) is among many who respond, no. She argues that a standardized approach to HRM may put the firm at a disadvantage because culture differences are ignored instead of being built upon. Broadening this theme, Laurent (1986) emphasizes the need for balance when he notes that in order to build, maintain, and develop their corporate identities, MNCs must strive for consistency in their ways of managing people on a worldwide basis; yet he notes that to be effective locally, they must also adapt to the norms and customs of the different societies in which they operate. In short, while the global nature of a business may call for increased consistency, the variety of cultural environments may, simultaneously, call for differentiation.

The global--local distinction is based upon a well-developed research literature that goes back at least to the work of Perlmutter (1969). More recently, Heenan and Perlmutter (1979), coined four terms to describe the various *types of businesses* operating on a global basis. They are: polycentric, regiocentric, geocentric, and ethnocentric. As Evans (1986) points out, each of these firm types represents a different way of coping with the different sociocultural environments in which MNCs operate.

At one extreme, where it is possible to discreetly define the divisions and business units and where these groups operate independently, an MNC would be advised to adopt polycentric human resource strategies. At the other end of the spectrum, for an MNC that feels compelled to centrally plan and execute its affairs in a highly consistent manner, the adoption of an ethnocentric human resource strategy would be in order. In between, in a worldwide industry, where divisions and subsidiaries are highly interdependent, an MNC would be advised to adopt geocentric, or global, human resource strategies. As for enacting more integrated human resource strategies, however, Schneider (1988) suggests that executives must take care in developing and proliferating global practices so that "geocentric" practices will look different from "ethnocentric" ones, because of their sensitivity to the need for differentiation.

Sheth and Eshghi (1989), building upon Heenan and Perlmutter's (1979) firm typology, have developed a framework for slotting different *business strategies*. This scheme also rests upon the inherent trade-offs between integration and localization. Sheth and Eshghi (1989) posit that when neither integration nor localization is important (and a firm devotes little attention to either one--by design or default), an ad hoc HR strategy will evolve. Of course, as an organization expands the scope of its business globally, this is less and less likely to be a viable option. Therefore, they propose that firms are most likely to adopt one of the other three strategic approaches to manage their business: decentralized, worldwide, or umbrella.

Using the IR Framework To Explain IHR Strategy

Given the usefulness of these firm and business strategy typologies, it seems as if the GI-LR backdrop may also be appropriate for classifying IHR strategies. Indeed, Jarillo and Martinez (1990) recently used the GI-LR framework to study the business strategies of 50 Spanish subsidiaries of MNCs. They propose that a subsidiary is following an "autonomous" strategy if it carries out most of the functions of the value chain in a manner that is relatively independent of its parent organization or other subsidiaries; it follows a "receptive" strategy if these functions are highly regulated and integrated with the rest of the MNC; and, finally, it follows an "active" strategy if many of its activities are carried out within the host country, but they are conducted in close coordination with the rest of the firm. When this is the case, the subsidiary functions as an active node in a tightly knit global network.

Milliman, Von Glinow, and Nathan (1991) have also studied subsidiaries and their strategies. In particular, their focus has been on HR strategies. They introduced and focused on the concept of fit, *external--outside organizational fit* and *internal--outside organizational fit*.

In short, external--outside organizational fit is the degree of fit between the subsidiary's IHR activities and the cross-national and cross-cultural environments that it is operating in. Alternatively, internal--outside organizational fit is the fit between the IHR activities of the subsidiary and the IHR activities across the rest of the MNC. In other words, they propose that a subsidiary needs to consider its standing within the MNC (internal fit) and its place within a web of local, national, and global environments (external fit) when it develops its IHR strategies (Figure 1).

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It appears that the Jarillo and Martinez (1990) business strategy framework outlined in Table 2, which builds on the foundational work of Heenan and Perlmutter (1979), Bartlett and Ghoshal (1987), and Sheth and Eshghi (1989), and blends in the Milliman, Von Glinow, and Nathan (1991) concept of "fit," is suitable to be extended to classify different IHR strategies at the subsidiary level.

Indeed. by extending this framework, we can look at a subsidiary's IHR policies and practices in a given country and say that it has adopted an "autonomous IHR strategy" if a low degree of integration and high degree of localization is present; that it has a "receptive IHR strategy" if a high degree of integration and low degree of localization exists; and that it pursues an "active IHR strategy" if a high degree of integration and high degree of localization occurs.

If we examine IHR strategy in light of Heenan and Perlmutter's (1979) typology for classifying firms, we can see that the "autonomous strategy" will be typical of subsidiaries of polycentric firms; the "receptive strategy" will be characteristic of subsidiaries of ethnocentric firms; and the "active strategy" will be representative of subsidiaries of geocentric firms. Recognizing the apparent need to emphasize either globalization or localization, or to strike some balance between the two, and the need to pursue the proper "fit," within the MNC and across its the environments in which it operates, we can hypothesize,

Hypotheses 1: *The IHR strategies of MNCs' subsidiaries will be segmented according to two dimensions of IHR strategy: globalization and localization. The sample of subsidiaries will fall into three subgroups depending on their IHR strategies. These clusters will resemble the three types identified by Jarillo and Martinez (1990): autonomous strategy, receptive strategy, and active strategy.*

THE DETERMINANTS OF IHR STRATEGY

Interorganizational Interdependence

At the least, two theoretical perspectives, resource dependence (Pfeffer and Cohen, 1984; Pfeffer and Langton, 1988, Pfeffer and Salancik, 1978) and institutionalism (Scott, 1987) speak directly to the role that interorganizational interdependence has in the context of IHR. Indeed, several studies have examined the dependence that a subsidiary has on its multinational parent for resources and the resultant influence that the *parent* has on the subsidiary's HRM policies and practices (Baliga and Jaeger, 1984; Jaeger and Baliga, 1985; Martinez and Ricks, 1989). As Prahalad and Doz (1987) allude to, however, relationships between parents and subsidiaries are far from static. As subsidiaries mature and grow, they often acquire adequate technology, management capability, and even marketing proficiency so that headquarters cannot continue to unilaterally control these resources as a means for influencing the subsidiary's strategies.

Another lingering question is, how will a subsidiary's dependence on *local resources* and *host institutions*, or a lack thereof, affect its IHR strategy? With respect to the latter, institutional theorists have long argued that the relational networks in the institutional environment play an important role in influencing the behavior of organizations (Meyer and Scott, 1983; Zucker, 1988). Indeed, subsidiaries usually reside in an external network comprised of host institutions, sister business units, suppliers, regulators, and competitors, all of whom may influence its HRM activities (Wright and McMahan, 1992). Given the complexity of this web of relationships, there is a need to investigate the degree to which a subsidiary is beholden to its various resource providers (including its parent, local concerns, and host institutions) is evident.

Dependence on Parent's Resources

Frequently, the parent of a MNC relies on its control over scarce or critical resources (such as capital, technology, and management) as a means of influencing subsidiary strategies, be they business or IHR strategies. According to the resource dependence model (Pfeffer and Salancik, 1978), if a subsidiary depends on a flow of valuable resources (e.g., money, technology, information, skills) from out-of-country organizations (headquarters and other sister subunits of the MNC, for example), these providers will influence the subsidiary's human resource practices (Pfeffer and Cohen, 1984; Pfeffer and Langton, 1988). This interdependence may foster a more globalized approach to HRM (Stopford and Wells, 1972). Indeed, in a recent study, Martinez and Ricks' (1989) found that the amount of influence MNC parents exert over the HRM decisions of their subsidiaries is positively related to the extent to which multinational parents provide resources to their subsidiaries. Under this scenario, the hierarchical power of headquarters more than offsets any counteracting, locally-derived power of the subsidiary. It is, therefore, usually easier to control the relationship through formalized control mechanisms. Prahalad and Doz (1981) echo this assertion when they posit that, support systems (such as personnel) tend to be aligned throughout the organization in a purely hierarchical organization. Thus, the more dependent the subsidiary is on its parent's resources, the more standardized, globally integrated, its IHR strategies will be. Consequently,

Hypothesis 2: *The globalization of a subsidiary will be positively related to the extent of its dependence on its parent's resources.*

Dependence on Local Resources

As a subsidiary matures and grows, it may be able to build a better base of technical, manufacturing, and financial resources, management capabilities, and overseas relationships. Typically, this will even lead to the marketing and sales of products outside the boundaries of the subsidiary's host country. When the subsidiary reaches this stage in its life cycle, its success may depend more on how well it fits into its local environment than on how much support it receives from its headquarters (Doz and Prahalad, 1986). On one hand, the subsidiary will be less dependent on its headquarters, and its HRM strategies may reflect more localization. Indeed, although it is likely that the parent retains a vested interest in the subsidiary, it may be difficult to enact a set of universal management systems and procedures in order to cope with the needs of every local environment. Thus, it appears that the more dependent on local resources the subsidiary is, the more localized its IHR strategies will be. Therefore,

Hypothesis 3: *The localization of a subsidiary will be positively related to the extent of its dependence on local resources.*

Dependence on Host Institutions

To this point, our discussion has focused on the importance of resource dependencies to explain IHR strategy. It is widely recognized, however, that organizations compete not just for resources, or even customers, but for political power, institutional legitimacy, and social acceptance as well (DiMaggio and Powell, 1983). Any subsidiary that interacts with host country customers, advocacy groups, regulators, or competitors is likely to be highly dependent on these host institutions.

Indeed, institutionalism (Scott, 1987) posits that the host country's customs, mores, and statutes (such as Equal Employment Opportunity regulations and Minimum Wage laws) will influence the HR practices of this subsidiary. In addition, the HR practices and practices of other organizations (like local labor, product, and capital market competitors) are bound to exert an influence on the subsidiary, especially a subsidiary that is striving to acquire or maintain a preferred employer status (Wright and McMahan, 1992). In summary, the subsidiary's host institution dependencies will undoubtedly temper its propensity to standardize and lead to the adoption of more localized IHR strategies. Consequently,

Hypothesis 4: *The localization of a subsidiary will be positively related to the extent of its dependence on host institutions.*

Ownership

MNCs and their local partners usually obtain an ownership stake by forming joint ventures or adopting one of many other types of alliances. Regardless of their structure, these relationships frequently create challenges for both the parent and the subsidiary. For example, employees assigned to the joint venture often experience conflicts and divided loyalties (Prahalad and Doz, 1981). When tensions like these exist, a MNC might turn to rigid control mechanisms (including personnel systems) to insure that strategic control is maintained (Prahalad and Doz, 1981). If this is the case, the parent may impose integrated, common HR policies to foster coordination. For instance, Cray (1984) argues that parents are more apt to exercise control when the subsidiary is predisposed to deviate from overall organization policies or practices.

Moving to the level of the firm, consider the case of a subsidiary seemingly caught in the middle; one with a high MNC ownership stake coupled with high host institution dependence. As stated previously, a strong dependence on host institutions may encourage and enable the subsidiary to localize and customize its strategy. On the other hand, the parent of a MNC who has a large ownership stake and faces this dilemma may try to override the subsidiary's strong need for legitimacy (and local isomorphism in the host country environment) through a powerful, efficiency-driven mandate across its worldwide operations.

It is clear that host institution dependencies and ownership positions play an important role in moderating the influence that technical and economic resource dependencies create (Westney, 1989; Ghoshal and Bartlett, 1990). Given this, we posit there will be an interaction between the parent's ownership stake in the subsidiary and the subsidiary's dependence on host institutions. The *greater* the *ownership stake*, the greater will be the parent's hierarchical power and the *more it will rely on IHR globalization* to subdue the influences of host institutions, some of which it may perceive as subversive. Alternatively, the *lesser* the parent's *ownership stake*, the weaker will be it's power and the more it will defer to its dependence on host institutions and thus *encourage IHR localization*. Therefore,

Hypothesis 5a: *The globalization of a subsidiary is positively related to the interaction of its dependence on host institutions and its parent's ownership stake.*
Hypothesis 5b: *The localization of a subsidiary is inversely related to the interaction of its dependence on host institutions and its parent's ownership stake.*

DATA, MEASURES, AND METHODS

Data

The subsidiaries of 321 foreign MNCs operating in Taiwan were surveyed in the summer of 1993. Since small firms seemed less likely to have formalized HRM systems (Snell, 1992), the companies that were selected included the most important MNCs in the country, those among the largest 1,000 manufacturing and the largest 300 service companies in Taiwan. Most are located in the main industrial export area of Taiwan. A questionnaire was mailed to each subsidiary, and it was completed by either the CEO or the VP of Human resources in these subsidiaries. One hundred companies returned the questionnaire, for a response rate of 31%. Note that no parent has more than one subsidiary represented in the survey. The summary statistics (see Table 3) indicate that firms included in the study present a reasonably representative sample of MNCs operating in Taiwan. In all of these subsidiaries, the ownership stake of the parent company was at least 50%. Indeed, for most, this percentage approached 100%. Seventy-nine companies were manufacturing based and 21 were in service industries. The breakdown by parent country origin was also quite diverse: 48% were Japanese, 36% American, 13% European, and 3% Asian.

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Measures

Dependent Variable

IHR Strategy. As argued previously, it is reasonable to think of IHR strategy in terms of the levels of *global integration* and *local responsiveness* being adhered to by the MNCs and their Taiwanese subsidiaries. Therefore, in accordance with the technique suggested by Prahalad and Doz (1987), these two dimensions of IHR strategy were measured using two 6-item, 7-point scales. Like previous studies of international human resource strategy, the items chosen measure the subsidiary's organization culture, compensation and rewards, staffing and appraisal, and training and development (Tichy, Fombrun and Devanna, 1982; Schuler and Jackson, 1987; Bamberger and Philips, 1991). Indicators similar to those used in this study have frequently been used to isolate and measure the strategic benefits of localization (in this case, customizing HR policies to respond to the needs of the local environment) and globalization (here, importing standardized HR policies from headquarters).

Explanatory Variables

Interorganizational Interdependence. Three measures of interorganizational interdependence were tested: dependence on parent's resources, dependence on local resources, and dependence on host institutions. First, *dependence on parent's resources* was measured with a 3-item, 7-point Likert Scale adapted from the work of Martinez and Ricks (1989) and Prahalad and Doz (1981). It consisted of questions addressing the degree to which the parent's technology is used, the degree to which the parent's management system is shared, and the amount of integration between the subsidiary's purchasing activities and those within the rest of the MNC. *Dependence on local resources* was measured with a 5-item scale adapted from Prahalad and Doz (1981). It calibrated the reliance on local technological expertise, the reliance on local managerial expertise, the strength of the relationship with local suppliers, the ratio of the subsidiary's exports to total sales, and the ratio of the subsidiary's sales to its parent MNC's total sales. The non-financial items were measured using a 7-point Likert scale. *Dependence on host institutions* was measured with a 4-item, 7-point Likert scale adapted from Ghoshal and Bartlett (1990). It gauged the reliance on the host government, the reliance on the host country's distribution channels, the reliance on management knowledge provided by local competitors, and the reliance on management knowledge provided by local partners.

Ownership. The *ownership* variable measures the MNC's capital investment in the venture as a percentage of the subsidiary's total capital. For these subsidiaries, ownership ranged from 51% to 100%.

Control Variable

Industry Type. The sample of subsidiaries was divided into two industry types, manufacturing and service, based on their primary line of business and industry classification code.

Methods

The first step in this study was to analyze the IHR strategy construct and its dimensionality. We then turned to the competitive strategy and interorganizational interdependence explanatory variables and examined their dimensionality. Factor analysis was employed to examine these constructs; since it is known to be useful for construct validation, detecting tentative dimensions, and identifying items for deletion (Schwab, 1980). The indicators for each of the constructs we studied were grouped so that the underlying dimensions could be identified. The specific methodology applied was factor analysis of principal components with varimax rotation, which assesses the convergence within and the divergence between scales.

Next, the two IHR strategy dimensions were used to classify the subsidiaries in the sample. The two dimensions (globalization and localization) of IHR strategy that emerged allowed for the identification and classification of strategic clusters, subsidiaries following similar IHR strategies. In this stage of the analysis, two subsidiaries were deemed to be in the same strategic group if they demonstrated similar levels of global integration and local responsiveness. The primary objective of this step was to obtain a taxonomy of IHR strategies using the empirically measured dimensions of this concept (Martinez and Jarillo, 1991). Another objective was to compare the taxonomy that emerged with the proposed IHR strategy typology depicted in Figure 1. This phase of our IHR strategy analysis was conducted using a cluster analysis technique that follows the "k-means" algorithm (Hartigan 1975; Hartigan and Wong 1979).

The final stage in this study consisted of examining the linear relationships between the dimensions of IHR strategy and their contextual determinants. This enabled us to test the hypotheses formulated previously. One set of hypotheses (2, 3, 4) tests the interorganizational interdependencies (parent, local, host). The other hypotheses (5a, 5b) focus on an interaction of interest. A hierarchical model, in which the control, explanatory, and interaction variables were entered according to their predicted causal sequence was utilized (Stone and Hollenbeck, 1984; Baron and Kenny, 1986). First, industry type and ownership were regressed on the globalization and localization. Since the strategic context of firms tends to vary across industries, we entered these control variables into each regression equation prior to examining the hypothesized relationships (Snell, 1992). Then, the relevant explanatory variables were sequentially added to the equation. The effects of our explanatory variables were assessed on the basis of their individual unstandardized regression coefficients and their contribution to the total variance in IHR globalization and localization, evaluated as the change in R^2 (Duncan, 1975; Aiken and West, 1991). Finally, the interaction terms were entered into the equation after all the related variables in this study had been controlled for (Cohen and Cohen, 1983).

RESULTS

Intercorrelations

Table 3 gives the means, standard deviations, coefficient alphas, and intercorrelations for all the variables. The alphas indicate internal consistency. Note that the alphas for the IHR strategy (globalization and localization) measures exceeded .90. This is a level which is satisfactory for basic research; for the proportion of error variance for a scale with alpha = .80 is exactly the same for any test regardless of the number of items (Cortina, 1993). Note that although the alphas for the interorganizational interdependence variables are not above the .70 level, they still meet Nunnally's (1967) criterion of a minimum of .50 for adequate reliability.

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Factor Analyses: IHR Strategy

The factor analysis of the *IHR strategy* variables produced two distinct, stable factors representing IHR globalization and IHR localization. They were the only factors that had eigenvalues above 1.0. Together they accounted for 68.30 percent of the variance in the data. Table 5 gives the items and their factor loadings.

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Cluster Analysis: IHR Strategy

The 100 MNCs and their subsidiaries were classified according to their IHR strategic dimensions using a "k-means" cluster analysis. The results of this analysis are presented in Table 5 and Figure 2, where two dimensions, IHR globalization, integration, and IHR localization, responsiveness, emerge and appear to be good discriminators for these strategic groups. Three distinct strategic clusters were formed lending support to hypothesis 1. Note that the three-group clustering is robust, for the variance across the groups is substantially larger than variance within the groups.

Of these three groups (see Figure 5), the first, composed of 33 firms with high integration and low localization, may be thought to adopt the "receptive" IHR strategy. The second group, made up of 36 firms, with high integration and localization may be categorized as having undertaken an "active" IHR strategy. The third contains the remaining 31 firms. These minimally integrated and highly localized subsidiaries appear to adhere to an "autonomous" IHR strategy.

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Factor Analyses: Interorganizational Interdependence

The factor analysis of *interorganizational interdependence* items produced three stable factors representing subsidiaries' dependence on host institutions, dependence on local resources, and dependence on parent's resources. They were the only factors to emerge with eigenvalues above 1.0. Together they account for 50.54 percent of variance in the data. Table 6 gives the items and the factor loadings.

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Moderated Multiple Regression Analysis: Predicting the Dimensions of IHR Strategy

In the first hierarchical regression analysis (see Table 7), we test the hypotheses that address the main and moderated effects of the contextual determinants on the first IHR strategy dimension, global integration. We begin in Equation 1 by regressing IHR integration on industry type and ownership. In Equation 2, the interorganizational interdependence variables (dependence on parent resources, dependence on local resources, and dependence on host institutions) were included. Then, the interaction term, dependence on host institutions and ownership, is brought into Equation 3.

These models allow for an empirical evaluation of the dependence on parent's resources, dependence on host institutions, dependence on local resources, main effects, and the interaction term. As can be seen, the results of this study provide some support for the notion that integration is most likely to be important when the parent controls critical resources or has a large ownership stake.

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In the second hierarchical regression analysis (see Table 8), we test the hypotheses that deal with the main and moderated effects of the contextual determinants of the other dimension of IHR strategy, local responsiveness. To start, in Equation 1, we regress industry type and ownership on IHR localization. In Equation 2, the interorganizational interdependence variables (dependence on parent's resources, dependence on local resources, and dependence on host institutions) are added. Finally, in Equation 3, the model is completed when the interaction term, dependence on host institutions and ownership, is incorporated.

These hierarchical equations enable us to empirically examine the main effects of the dependence on parent's resources, dependence on host institutions, dependence on local resources, and an important interaction term on HR localization. Essentially, the data support the notion that localization of HR strategies is most likely when a subsidiary has a high dependence on local resources.

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DISCUSSION

The Determinants of the Global Integration Dimension of IHR Strategy

After controlling for industry type and ownership in Equation 1, Equation 2 (Table 7) provides us with an opportunity to examine the effects of a subsidiary's interorganizational interdependencies on IHR integration. Regarding Hypothesis 2, which poses a positive relationship between *dependence on parent's resources* and the level of global integration, the results are strongly supportive in Equation 3 (b=.75, p<.001), and in the preceeding model. Thus, the more a subsidiary relies on its parent for critical resources, the easier it is for the parent to conform the subsidiary's HR strategies to its own. More broadly, given their explanatory power, there is evidence to assert that the interorganizational interdependence measures, are crucial for explaining the adoption of an integrated IHR strategy (ΔR^2=0.225).

Equation 3 provides a test of Hypothesis 5a, which addresses the proposed positive relationship between the interaction term, dependence on host institutions and ownership, and globalization. In our study, this hypothesis was supported (b=0.084, p<.05, ΔR^2=.025). Note that the main effect of the *dependence on host institutions* variable was, initially--in equation 2, positively related to globalization. Introducing the interaction term, however, demonstrates that host institution dependence, which may entail the fear of a usurpation of control, in and of itself is not related to global integration. Only when dependence on host institutions increases *and* the MNC's ownership stake is large, is there an impetus for global integration. Otherwise, an increase in dependence on host institutions is associated with less global integration.

In sum, these findings suggest that when a subsidiary is highly dependent on the MNC to provide crucial resources, it is common for the MNC to exert control over subsidiary through the formal coordination mechanisms that IHR strategies and systems offer. Moreover, when a MNC has a large ownership stake in its subsidiary, any dependence on host institutions is offset by the inherent power of headquarters to set strategy. This seems to occur in spite of the threat, be it real or imagined, that the subsidiary will suffer because of its insensitivity to the concerns and demands of its host institutions.

The Determinants of the Local Responsiveness Dimension of IHR Strategy

Next, we turn to the determinants of HR localization. First, note that the relationship between interorganizational interdependencies and HR localization is introduced in Equation 2 (Table 8). In this (b=.32, p<.01) and the subsequent (b=.32, p<.01) model, a significant positive relationship between the *local resources dependence* variable and HR localization is found. Hence, Hypothesis 3a is supported. Contrary to hypothesis 4, a meaningful relationship between *host institution dependence* and localization was not observed.

As for the interaction term, Equation 3 shows that a negative, significant relationship was observed for the *subsidiary's dependence on host institution and ownership* term (b=-0.10, p<.01). Thus, Hypothesis 5b is supported. There is an inverse relationship between HR localization and host institution dependence for high ownership companies and a positive relationship between HR localization and dependence on host institutions. In other words, if the MNC's power derived through its ownership claim, is sufficient enough to offset the forces that local isomorphism has over the subsidiary, localization declines. If the parent's ownership is diluted, the subsidiary's dependence on host institutions will result in greater localization.

In sum, there are two overarching conclusions that may be derived from this study. First, MNCs seem to adapt strategies that emphasize different levels of integration and responsiveness. Given this, the proposed IHR strategy typology is a useful tool for defining the IHR strategies of MNCs and their subsidiaries. Second, there seems to be a strong relationship between a subsidiary's IHR strategy (both the globalization and localization dimensions) and its interorganizational interdependencies (parent, local, host).

Conclusions and Implications For Future Research

By definition, MNCs usually consist of headquarters and various national subsidiaries. In addition, MNCs have also been referred to as interorganizational networks, networks that are embedded in an external web of relationships made up of other organizations, shareholders, regulators, customers, suppliers, and other stakeholders. There is little doubt that headquarters and their subsidiaries must effectively interact with these various groups to be successful. In any interorganizational network, a subsidiary's IHR strategy is likely to be influenced by its interorganizational interdependencies, which include dependence on parent's resources, dependence on local resources, and dependence on host institutions. Indeed, Baliga and Jaeger (1984) stress that interdependencies are the most crucial factors influencing the IHR strategies of any subsidiary. In this study, a global integration/local responsiveness framework for strategic international human resource management was developed. Following this, an empirical examination of the relationship between IHR strategy and its contextual determinants was undertaken and it showed that these dependencies are indeed important.

We asserted that although the field of strategic international HRM has been advancing, most of the development has been conceptual, focusing on the effects that cultural factors or product life cycles have on different business strategies. As has been empirically demonstrated in this study, however, these factors are not nearly as informative as interorganizational interdependencies when analyzing the determinants of IHR strategies.

In closing, it is necessary to note that this study has several limitations that need to be improved upon in future research efforts. First, as reported, the respondents for this study were CEOs and VPs of HR at Taiwanese subsidiaries. The parent's executives stationed at headquarters did not participate in this survey. Future research might look to incorporate inputs from multiple respondents, including the corporate counterparts, or managers, of the executives we surveyed. Second, tapping the assessments of the subsidiaries' expatriates, including third country nationals, might enrich future studies. As Martinez and Ricks (1989) point out, expatriate managers have a profound influence on affiliates' HRM decisions. Therefore, future studies that include inputs from this group may be even more informative. Third, future research might try to refine the constructs and operationalizations of interorganizational interdependence. Last, the construct domain for the two dimensions of IHR strategy, integration and localization, could be clarified even further. In this study, we used a universal set of HRM tasks to define these dimensions, because the IR framework was designed for analyses at task level (Prahalad and Doz, 1987; Ghoshal, 1987). Nevertheless, further research is needed to specify the types of HRM systems that may be used to respond to global integration and local responsiveness pressures.

Despite these limitations, the findings from this study contribute to our understanding of the contextual determinants of international human resource strategy at the subsidiary level, especially the role that interorganizational interdependencies play. Accordingly, these insights should prove to be useful to international human resource managers and researchers interested in strategic international human resource management.

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Table 1
Relevant Firm Categorization Schemes

Author(s)	Heenan and Perlmutter 1979	Bartlett and Ghoshal 1987	Sheth and Eshigi 1989	Jarillo and Martinez 1990	Milliman Von Ginlow and Nathan 1991	Present Study
Level Emphasized	Firm	Firm	Parent / Subsidiary	Subsidiary / Parent	Parent / Subsidiary	Subsidiary / Parent
Global Dimension	Inter dependence	Global Integration	Consistency	Global Integration	Global Integration	Global Integration
Local Dimension	In dependence	National Responsiveness	Localization	Local Responsiveness	Local Responsiveness	Local Responsiveness
High Global Low Local	Ethnocentric *Firm*	Global *Firm*	Worldwide *Strategy*	Receptive *Strategy*	Internal Fit *HR Strategy*	Receptive *HR Strategy*
Low Global High Local	Polycentric *Firm*	Multinational *Firm*	Decentralized *Strategy*	Autonomous *Strategy*	External Fit *HR Strategy*	Autonomous *HR Strategy*
High Global High Local	Geocentric *Firm*	Transnational *Firm*	Umbrella *Strategy*	Active *Strategy*	Internal and External Balance *HR Strategy*	Active *HR Strategy*

Figure 1
Subsidiaries' IHR Strategies
Present Study (Based on Jarillo and Martinez, 1990)

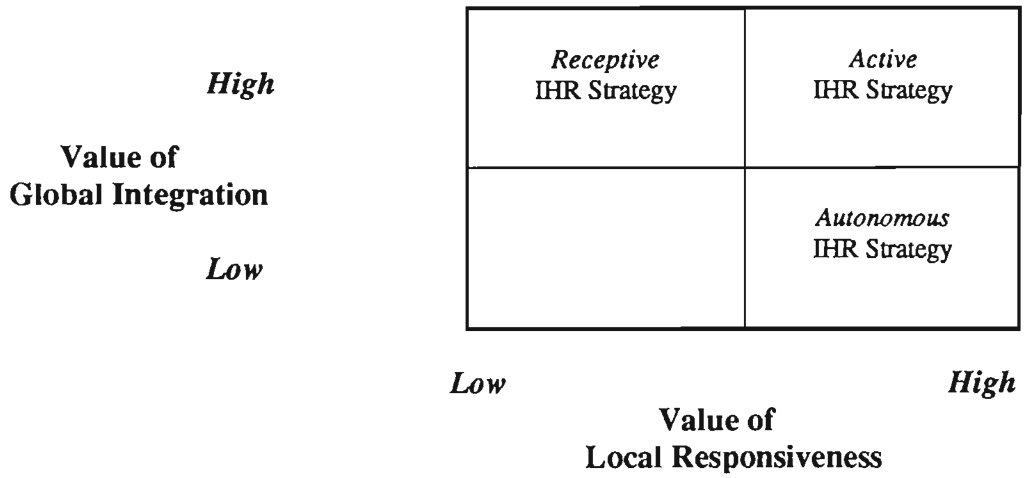

Table 2
Subsidiary Sample Profile

Characteristic	Categories	# Firms
Parent's Nationality	Japanese	48
	American	36
	European	13
	Asian	3
Parent's Ownership	50% - 60%	15
	60% - 70%	7
	70% - 80%	3
	80% - 90%	3
	90% - 100%	72
Employees	under 100	31
	100 - 500	40
	500 - 1000	14
	1000 - 2000	10
	over 2000	5
Industry Type	Manufacturing	79
	Service	21
		n=100

Table 3
Summary Statistics for Subsidiary Sample

Variable	mean	s.d.	α	1	2	3	4	5
Interorganizational Interdependence								
1. Dependence on Host Institution	15.41	4.46	.61	—				
2. Dependence on Local Resources	23.25	5.26	.59	.09	—			
3. Dependence on Parent's Resources	13.65	3.61	.54	.13	-.10	—		
IHR Strategy								
4. Global Integration	24.05	7.55	.91	.22	-.17	.46	—	
5. Local Responsiveness	28.95	5.65	.90	.13	.33	.03	-.09	—

N=100, Correlations above .15 are significant at p<.05, standardized item alpha

Table 4
Factor Analysis: Subsidiaries' IHR *Strategy*

Questionnaire Items	Factor Loadings 1	2
1. ***Global Integration***		
Promotion and Career System	**0.87**	0.07
Corporate Culture	**0.87**	0.07
Training Program	**0.85**	0.06
Compensation Policy	**0.79**	-0.15
Appraisal Program	**0.79**	0.01
Staffing Policy	**0.77**	-0.10
2. ***Local Responsiveness***		
Promotion and Career System	-0.04	**0.85**
Staffing Policy	-0.03	**0.85**
Appraisal Program	0.12	**0.83**
Training Program	0.02	**0.82**
Corporate Culture	0.05	**0.81**
Compensation Policy	-0.15	**0.74**
Eigenvalue	**4.44**	**3.76**
Percentage of Variance Explained	**37.00**	**31.30**
Total Variance Explained	**37.00**	**68.30**

Table 5
Cluster Analysis: Subsidiaries' IHR Strategies

Factor	Inter-group variation	Intra-group variation	F value	P level
1: *Global Integration*	3758.451	1887.389	96.58	0.0001
2: *Local Responsiveness*	1482.931	1671.819	43.02	0.0001

Cluster	Firms	Factor	Min.	Mean	Max.	s.d.
1. Receptive						
high global	33	*Integration*	21.00	27.39	36.00	4.61
low local		*Localization*	12.00	23.73	27.00	3.20
2. Active						
high global	36	*Integration*	23.00	28.81	37.00	3.85
high local		*Localization*	28.00	32.86	42.00	4.04
3. Autonomous						
low global	31	*Integration*	6.00	14.94	21.00	4.97
high local		*Localization*	21.00	29.97	42.00	5.08

Figure 2
Cluster Analysis: Subsidiaries' IHR Strategies

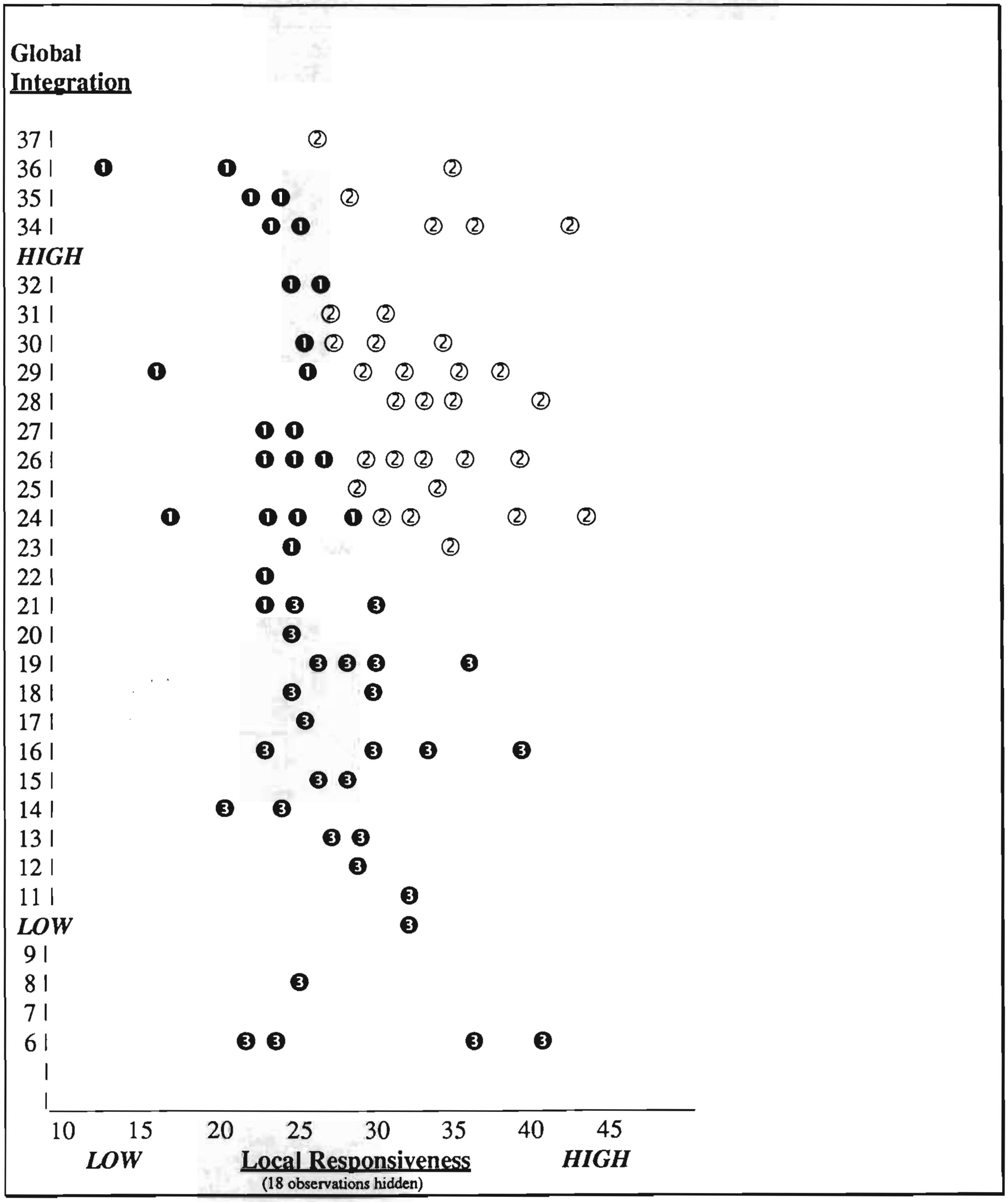

Table 6
Factor Analysis for Subsidiaries' *Interorganizational Interdependences*

Questionnaire Items	Factor Loadings 1	2	3
1. Host Institution's resource dependence			
a. Emphasis of management reference to local competitors	**0.67**	0.17	-0.08
b. Emphasis of relationship with local distributors	**0.64**	0.02	0.04
c. Emphasis of management reference to local partners	**0.64**	0.05	-0.49
d. Emphasis of relationship with host government	**0.57**	0.14	0.22
2. Local resource dependence			
a. Dependence on managers supply	0.23	**0.72**	0.11
b. Dependence on technicians supply	0.35	**0.71**	-0.01
c. Emphasis of relationship with local suppliers	0.01	**0.63**	0.16
d. Ratio: Subsidiary sales to MNC sales	-0.38	**0.50**	-0.29
e. Ratio: Subsidiary exports to subsidiary sales	-0.44	**0.47**	-0.24
3. Parent resource dependence			
a. Technology importing from the MNC	-0.20	0.14	**0.77**
b. Management system imported from the MNC	0.03	0.14	**0.77**
c. Integration of purchasing w/ the rest of MNC	0.21	-0.14	**0.42**
Eigenvalue	**2.67**	**1.93**	**1.46**
Percentage of Variance Explained	**22.24**	**16.11**	**12.19**
Total Variance Explained	**22.24**	**38.35**	**50.54**

Table 7
Results of Hierarchical Regression Analysis for *IHR Globalization*

Variables	Equation 1 b	Equation 1 s.e.	Equation 2 b.	Equation 2 s.e.	Equation 3 b.	Equation 3 s.e.
Intercept	22.76+++	1.88	10.47+	4.63	22.91++	8.23
Industry type	-1.70	.91	-1.01	.84	-1.01	.83
Ownership	.27	.20	.23	.19	-1.19	.81
Interorganizational Interdependence on:						
Host Institutions (HI)			.35*	.16	-.32	.40
Local Resources (LR)			-.18	.13	-.18	.13
Parent's Resources (PR)			.80***	.19	.75***	.19
Interaction Terms						
HI *Ownership					.084*	.046
df		2,97		5,94		6,93
F		2.75		7.28**		6.77**
R^2		.054		.279		.304
ΔR^2		.054		.225		.025
n		100		100		100

+ p<.05 , ++ p<.01 , +++ p<.001 (two-tail)
* p<.05 , ** p<.01 , *** p<.001 (one-tail)

Table 8
Results of Hierarchical Regression Analysis for *IHR Localization*

Variables	Equation 1 b	Equation 1 s.e.	Equation 2 b.	Equation 2 s.e.	Equation 3 b.	Equation 3 s.e.
Intercept	28.92+++	1.40	18.61+	3.75	3.57	6.53
Industry type	1.50+	.68	1.04	.68	1.04	.66
Ownership	-.10	.15	-.11	.15	1.61	.64
Interorganizational Interdependence on:						
Host Institutions (HI)			.10	.13	.91	.31
Local Resources (LR)			.32**	.11	.32**	.10
Parent's Resources (PR)			.12	.16	.18	.15
Interaction Terms						
HI *Ownership					-.102*	.037
df		2,97		5,94		6,93
F		2.68		3.31**		4.23***
R^2		.052		.150		.214
ΔR^2		.052		.098		.064
n		100		100		100

+ p<.05 , ++ p<.01 , +++ p<.001 (two-tail)
* p<.05 , ** p<.01 , *** p<.001 (one-tail)

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