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Functional Specialization,
Culture, and Preference
For Participative Management

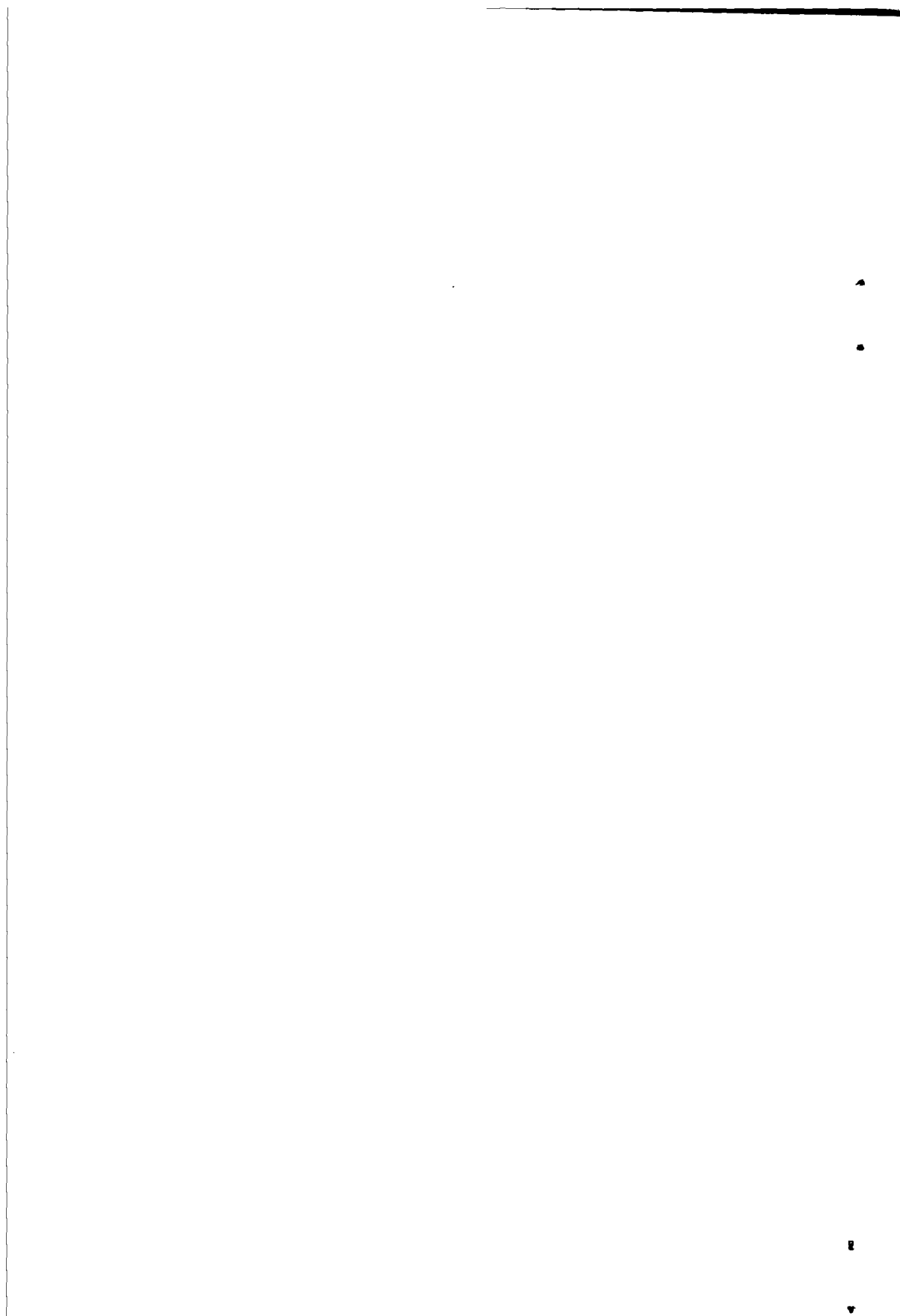
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13. ABSTRACT Six hundred and twenty-seven managers representing six cultures completed Exercise Supervise (Bass, 1967). Three hypotheses were evaluated. Is participative management universally preferred as a management style? Second, could earlier work by Heller and Yukl (1969) indicate that the functional specialization (finance, sales, and personnel) of American managers was a significant predictor of decision-making style (power differentiating versus power equalizing) be generalized to other cultures? And finally, are different qualities seen as necessary for success as a top manager, middle manager, and first-line foreman by managers from different cultures? Results indicated that there is some generality for American-style participation, but it is not a universal phenomenon; functional specialization was not a statistically significant predictor of decision-making style, but results were in the predicted direction; and the six cultures yielded significantly different profiles of qualities deemed necessary for success as a top manager, middle manager, and first-line foreman.			

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FUNCTIONAL SPECIALIZATION,
CULTURE, AND PREFERENCE
FOR PARTICIPATIVE MANAGEMENT¹

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Over the last ten years the literature on management and administration has reflected a growing interest in the subject of managerial decision-making. One frequently encounters such terms as "participation," "power equalization," "decentralization," and "democratic leadership" in the relevant literature on this subject. These terms all refer to an important and controversial aspect of managerial decision-making, namely the extent to which it is shared by the manager's subordinates. There are a number of different decision-making procedures that managers or, for that matter, any formal leader can use. Some procedures involve a great deal of subordinate influence, and others exclude the subordinate altogether from the decision-making process. Although there is no widely accepted typology or model for classifying the decision behavior of managers, there does appear to be wide acceptance of the general concept of a continuum of subordinate influence along which various decision procedures can be ordered.

Various social scientists have proposed systems for classifying managerial decision-making or for describing the amount of subordinate influence. March and Simon (1958) suggested a continuum of supervisory styles ranging from "decisions made by the supervisor and communicated to the worker without prior consultation" to "decisions made on the basis of free and equal discussion." Tannenbaum and Schmidt (1958) described a scale of leader behavior with seven differentiated styles of decision-making. Likert (1961 and 1967) has elaborated four styles of managerial decision-making, each corresponding to one of his four theoretical approaches to organizational management. In addition, Likert mentioned a twelve-point

¹For a description of the development of the bank, see Barrett (1968).

scale for describing the amount of subordinate participation that occurs when organizational change is introduced. Blake and Mouton (1961) have proposed a system for evaluating the amount of weight an individual exerts on a decision made by himself and a subordinate, measured on a "power spectrum." Strauss (1963) has differentiated between decisions made by managers alone, decisions made jointly by managers and subordinates, and decisions which the manager permits the subordinate to make on his own.

Despite the basic agreement that various decision styles represent different degrees of subordinate influence and participation, there has been little attempt to develop and apply measures based on a complex typology of decision procedures. Although there has been much discussion in the literature of the constraints and demands placed on the leader by his situation (e.g. Tannenbaum and Massarik, 1961), a systematic investigation of the relation between situational variables and leader decision-making has not been undertaken. The small number of studies that have related situational variables to decision-making (surveyed by Bass, 1967) strongly support the proposition that a leader's situation substantially limits and shapes his decision behavior, but further research is clearly needed.

Heller and Yukl (1969) reported a study in which two hundred and three senior managers, first and second-line supervisors, and student leaders from 16 organizations responded on their decision behavior. This research had three distinct features: 1) a five-fold typology of decision behavior on a continuum of subordinate influence which varied from delegation at one end of the scale, to decisions made by the leader without explanation to his subordinate at the other end, was presented; 2) the measuring scales used realistic organizational problems for the purpose of assessing decision-making and participation; and 3) the decision-making preferences of different

groups of leaders were compared and related to situational variables. Significant relationships were found between decision behavior and six of the seven situational variables.

One purpose of the present research is to further investigate the nature of a single situational variable reported by Heller and Yukl (1969), functional specialization, and its relationship to the style of decision-making that will be selected. The sample of senior managers in the Heller and Yukl study (N = 66) was divided into six managerial functions: production, finance, sales, purchasing, personnel, and nonspecialized "general management." Analysis of the decision centralization (power differentiation) scores for these six groups of managers yielded three clusters. Production and finance managers tended to use centralized decision styles, whereas non-specialized "general" managers and personnel managers tended to be the most permissive. Managers of purchasing and sales units occupied an intermediate position on the influence continuum. Analysis of variance indicated that the mean decision-centralization scores for these three clusters of managers were significantly different ($F = 3.84$; $p < .05$).

The extent to which programmed jobs (e.g. finance and production) restrict the meaningful possibilities of participation has been pointed out in the literature, but particularly in relation to lower level jobs (Leavitt, 1965). The findings of Heller and Yukl (1969) suggested that the concept may also operate at very senior levels.

Haire, Ghiselli, and Porter (1966) hypothesized that there might be only superficial acceptance of American participative management practices by managers in more traditional societies. Their data suggested that managers in such countries were likely to subscribe to the merits of participative practices with their subordinates, yet at the same time to reject the

democratic ideology upon which such practices were based. This hypothesis indeed appears plausible. In a traditional society emphasizing status differences and dominance-submissive relations between superiors and subordinates, the manager may continue to exhibit the directive authoritarian style with which he is more comfortable. Likewise his subordinates may be more comfortable with him. The directive style may be better suited to the traditional society in which the manager must operate.

Bass (1968) empirically tested this hypothesis. Instead of asking managers in six cultures what they thought about participative management practices, he turned to a direct assessment of behavior. Half of each of his samples were confronted with a brief exposure in role playing decision processes, to participative managers, and to more directive managers. Afterwards, each subordinate was asked to indicate which decision-making experience was more satisfying, one where he was drawn into collaborating with his superior, or one where he was either persuaded or coerced by his superior. In what was regarded as a more disguised examination, the three kinds of superiors were confronted in the same decision-making process with subordinates who were either completely passive and uninvolved or who exhibited moderate or extreme concern about the decision outcomes. Previous work had indicated that most American superiors had tended to reject, or even be disturbed by the passive subordinate. If differences were found among cultures, would those cultures who preferred democratic superiors be the same ones that rejected submissive subordinates?

Bass's results (N = 246) indicated that (in descending order) the percentages preferring the participative process with a superior were: Dutch-Flemish, 62.5; Latin, 50.0; Anglo-American, 45.8; Indian, 41.7; Scandinavian, 36.7; and Greek, 22.2.

The percentages preferring the uninvolved passive subordinate (N = 213) were: Anglo-American, 14.3; Latin, 21.7; Dutch, 28.2; Scandinavian, 34.8; Greek, 41.7; and Indian, 53.3. Bass concluded that these results suggest that there is some generality about the cultural response to the issue of participation. But the implications for management and organizational development are apparent if these results hold up. In cultures where relatively, and even absolutely, more satisfaction is reported by both superiors and subordinates with supervisory direction and subordinate submission, we should seriously question whether we are justified in continuing to try to export, without qualifying considerations, American style participative management practices.

Another intriguing question is whether managers from different cultures see different qualities necessary for success as a top manager, middle manager, and first-line foreman. Of course, we would expect that managers' perceptions of the most important qualities necessary for success as a top manager would be different from those qualities necessary for success as a middle manager, and these in turn would be different from those seen as necessary for success as a first-line foreman. The question of interest is, "Do managers from different cultures see different qualities as necessary for success as a top manager?" Secondly, "Do managers from different cultures see different qualities as necessary for success as a middle manager?" And finally, "Do managers from different cultures see different qualities as necessary for success as a first-line foreman?"

In sum then there are three major hypotheses to be investigated in the present research. First, is the idea of participative management universal? This will involve a replication and extension of Bass's (1968) findings. Second, we will consider the nature of an important situational variable,

functional specialization, and its relationship to style of decision-making. This will involve a partial replication and an extension to different cultures of Heller and Yukl's (1969) work. The question of interest here is, "Do finance managers exhibit greater power differentiation than sales or personnel managers?" Third, are different qualities seen as necessary for success as a top manager, middle manager, and first-line foreman by managers from different cultures, and from different functional specialities within these cultures?

METHOD

As described by Bass (1967, 1968), Exercise Supervise is a self-instructional variant of the "power spectrum" (Blake and Mouton, 1961). As part of a training seminar usually devoted to one or more aspects of organizational psychology for middle managers, small groups of six managers each are provided with booklets in their native language containing three lists. Each is an identical list of 25 traits such as sharpwitted, calm, systematic, etc. On the first list, each participant, by himself, notes which five traits are most important for success among middle managers, and which five are least important. He does the same for top managers on the second list and for foremen on the third list.

Members then each choose one of six different colors. Depending on his color, each then reads one of six roles to play: authoritarian supervisor, persuasive supervisor, participative supervisor, vitally involved subordinate, moderately involved subordinate, or uninvolved subordinate. While each member knows his own role, he knows only that others are role playing but not what roles are being played or who is playing them. He usually assumes that the roles have something to do with simulating top, middle, and lower management.

Each acting subordinate now meets in one of several orders with one authoritarian, one persuasive (tell and sell) and one participative supervisor. Each acting supervisor meets in one of several orders, with a vitally involved, moderately involved, and uninvolved subordinate. The purpose of the first meeting of up to 15 minutes is to reach a final decision on which five traits are most and least true about middle managers. Everyone's second meeting deals with top managers, and everyone's third meeting deals with first-line foremen.

After completing the three final decision processes, each acting subordinate and acting superior indicates by himself with which decision meeting he was most satisfied.

SUBJECTS

In order for a case to be selected from the MRC data bank, the subject must have: 1) fully completed Exercise Supervise, and 2) be a manager in production-finance, sales, or personnel training. These corresponded to the high, medium, and low centralization groups of Heller and Yukl (1969). A total of 627 managers from six cultures met these criteria; they were Anglo-American, Latin, Northern European, Japanese, Indian, and Dutch-Flemish. Unfortunately, the criterion response of satisfaction with decision was missing from 35 cases. Of the 592 useable protocols, 272 were from participants who had played subordinate roles, and 320 who had played supervisory roles. The subjects were nationals of 21 different countries. The data were combined into six cultural clusters because of interest in culture rather than in nationality per se. Also in some countries the number of cases was so small (e.g. West Germany, 2; Spain, 11) as to make meaningful comparisons between countries impossible. Collapsing over countries there were 179 cases in group 1 (Latins), 116 cases in group 2

(Northern Europeans), 202 cases in group 3 (Anglo-Americans), 28 cases in group 4 (Japanese), 37 cases in group 5 (Indians), and 65 cases in group 6 (Dutch-Flemish).

RESULTS

Table 1 shows the extent to which the 272 subordinates in the various countries and cultures felt more satisfied with the participative decision-making meeting than the directive meetings. By chance alone 33 per cent should have chosen the participative meeting. In fact it can be seen that at one extreme over 64 per cent of the Dutch-Flemish subordinates preferred the participative meeting. At the other extreme only 29.4 per cent of the Indian subordinates preferred the participative meeting. In descending order the percentages preferring the participative process with a superior were: Dutch-Flemish, 64.7; Northern European, 56.4; Anglo-American, 53.1; Latin, 52.6; Japanese, 50.0; and Indian, 29.4. The obtained χ^2 of 12.306 is significant at $p < .05$.

 Insert Table 1 about here

Table 2 displays the extent to which the 320 supervisors were most satisfied to deal in a decision-making session with the uninvolved, passive subordinate. Here the progression in percentages was: Japanese, 18.1; Dutch-Flemish, 21.4; Northern European, 28.0; Latin, 28.2; Anglo-American, 29.8; and Indian, 75.0. Their overall chi square for culture by color ($\chi^2+77.22$) was significant at $< .001$. There were no significant interactions

 Insert Table 2 about here

between culture and function. Therefore, the overall sample was then combined and split according to functional specialty. These results are presented in Table 3. Personnel managers preferred participative supervisors most often (57.1 per cent), while finance managers preferred participative managers least often (44.4 per cent), and sales managers were mid-way in preference (50.5 per cent). These overall differences were not significantly different; however, when finance managers were contrasted against personnel managers, the z of 2.3 was significant at $p < .03$. Personnel managers were also most satisfied in dealing with the passive, uninvolved subordinate (30.5 per cent), finance managers least satisfied (26.5 per cent), and sales managers again fell mid-way with 27.5 per cent. The overall chi square ($\chi^2=9.113$) was not significant.

 Insert Table 3 about here

In order to investigate the question of whether managers from different cultures consider different traits necessary for success as a top manager, middle manager, or first-line foreman, a multivariate analysis of variance was performed for each of the three identical lists of 25 traits across functional specialties and cultures. Since the entire Japanese sample was composed of personnel managers only, and since the Indian sample included but one finance manager, both Japan and India had to be deleted from this analysis. This left us with three levels of job (finance, personnel, and sales) and four levels of culture (Latins, Northern Europeans, Anglo-Americans and Dutch-Flemish). Each of the 25 traits constituted a dependent variable. Since the manager's task on each of the three lists was to mark those five traits deemed most important to success, and those five deemed

least important to success, there would be 15 blank spaces (the manager may be considered neutral-neither high positive nor low negative regarding these traits) on each protocol. Responses were thus coded according to increasing positive affect. Those traits deemed least important for success were coded "zero," blanks were coded "one," and those traits deemed most important for success were coded "two."

A total of 553 cases was employed in each analysis. There were 175 useable protocols from the Latins, 113 from the Northern Europeans, 200 from the Anglo-Americans, and 65 from the Dutch-Flemish. Collapsing across functional specialty, there were 92 finance protocols, 308 personnel protocols, and 152 sales protocols. Table 4 presents the results of the multivariate analysis of the 25 traits with regard to the success of middle managers. As can be seen, the main effect for culture (multivariate $F=12.807$, $p < .0001$) is highly significant. Neither the main effect for job, nor the interaction of culture by job was significant.

Table 5 presents the results of the multivariate analysis of the 25 traits with regard to the success of top managers. In the multivariate case, the main effects for culture ($F=9.015$, $p < .001$) and job ($F=1.375$, $p < .04$) as well as the multivariate interaction of culture by job ($F=1.266$, $p < .01$) were all significant. Within the culture by job interaction, univariate F for the trait "cultured" ($F=2.709$, $p < .01$), was significant. The cell means and a graphic plot of this interaction effect are presented in Figure 1.

Insert Table 5 about here

Insert Figure 1 about here

Table 6 displays the results of the multivariate analysis of the 25 traits with regard to the success of first-line foremen. In the multivariate case, the main effect for culture was again significant ($F=8.966$, $p < .0001$). Neither the main effect for job nor the multivariate interaction of culture by job was significant. Within the culture by job interaction, however, univariate F s for the traits "steady" ($F=3.359$, $p < .003$) and "honest" ($F=2.962$, $p < .007$) were both significant. The cell means and graphic plots of each of these interaction effects are presented in Figures 2 and 3.

Insert Table 6 about here

Insert Figures 2 and 3 about here

DISCUSSION AND CONCLUSIONS

Let us consider each of the three hypotheses of interest in turn. First is the idea of participative management universal? Putting the cart before the horse, yes, we must agree with Bass (1968) that there is some generality for American-style participation, but it is not a universal phenomenon. The present results did not display the variance that Bass's (1968) results did. What may be happening is that participative management practices are becoming more universal. With the exception of Indian

managers (who decreased from 41.7 per cent to 29.4 per cent) every cultural cluster considered in the Bass (1968) study increased in acceptance of the participative decision style. In fact, with the exception of India, the other five cultures were all above 50 per cent in their acceptance of participation. The present Indian results, however, do bear a close relationship to results reported by Thiagarajan and Deep (1969) regarding Indian preferences for participation (29.2 per cent). Perhaps the most striking increase was in the Northern European countries. In Bass's (1968) work, 36.7 per cent endorsed participative management and they were ranked fifth out of the six cultures considered. In the present study, utilizing a larger sample of managers, this percentage increased to 56.4, and their ordinal position to second of six cultures. It must be pointed out, however, that the Japanese and Indian results may well be a consequence of chance due to the relatively small numbers of managers in each group; Japan had 28, India 37.

In considering the percentages of managers who chose to deal with the uninvolved subordinate, it is again apparent that the present results do not exhibit the large spread of scores that Bass's (1968) results did. The range of scores for the top five cultures in the Bass research was from 14.3 to 41.7 per cent. In the present research that range has decreased: 18.1 per cent to 29.8 per cent. The Indian results, however, are noteworthy. Seventy-five per cent of the 17 managers who played the role of supervisors preferred to deal with the apathetic subordinate. This is in contrast to the 53.3 per cent preference for the apathetic subordinate reported by Thiagarajan and Deep (1969).

It is interesting to speculate on the present results. One plausible hypothesis is that with one major exception (India), the dominance-submission

relationships characteristic of more traditional societies are becoming less rigid. Perhaps this is due to increased contact between members of traditional societies and members of more democratic, permissive societies. Perhaps there is a growing acculturation in non-American societies to American ideas and norms. However, we must agree with Bass's (1968) conclusion regarding India: "There is usually a surplus of subordinates in India. Submissiveness is expected and may be a price paid by subordinates for their security. A polite dominance-submission relationship is maintained."

Hypothesis 2 asks if finance managers exhibit greater power differentiation than either sales or personnel managers. Conversely, do personnel managers exhibit more power equalization than finance or sales managers in dealing with their subordinates? In terms of statistically significant differences the answer is no. In terms of relative differences the answer is a qualified yes.

When the data were collapsed over culture, and analyzed strictly according to functional specialty χ^2 was not significant. However, relatively speaking, finance managers were least satisfied in dealing with participative supervisors, and personnel managers were most satisfied. Sales managers, as predicted, were in between.

Perhaps the most appropriate test of Heller and Yukl's (1969) findings regarding functional specialization and its relationship to power differentiation-equalization would be with Anglo-American data. Their original findings were based on American managers. Strictly speaking, it would be unfair to disagree with their findings, if we did not include managers from their original cultural sample. With regard to preference for a participative supervisor, Anglo-American finance managers were least

satisfied, personnel managers most satisfied, and sales managers in between. The range of differences is only 8 percentage points however, and is not statistically significant. Among Anglo-American finance managers, 37.9 per cent, highest of all six cultures, chose to deal with the apathetic, uninvolved subordinate. Only 19.3 per cent of the sales managers chose likewise. Personnel managers were actually ranked fifth (32.4 per cent) of six cultures in preference for the uninvolved subordinate.

In sum then, the data bearing on this hypothesis do not lend themselves to any clear-cut conclusions. Relatively speaking, the results do generally conform to Heller and Yukl's (1969) findings, but we did not get the sharp clustering effect between finance, sales, and personnel managers that Heller and Yukl did. Perhaps these differences are due to the different procedures employed in the two experiments, or the relatively small N sizes used in both experiments. The hypothesis is an intriguing one; we don't believe the final definitive results are in yet.

With regard to Hypothesis 3, we are asking if different qualities are seen as necessary for success as a top manager, middle manager, and first-line foreman by managers from different cultures, and from different functional specialties within these cultures. The answer to this question is yes. The main effect for culture was highly significant in all three multivariate analyses. The six cultures yielded different profiles of scores across the 25 dependent variables. Again, in considering these multivariate main effects it is not appropriate to consider which of the univariate Fs was significantly different since each of the 25 variables is in some way dependent on each other, and the ratings of the 5 traits deemed most and least important for success are from the same person. All we are justified

in saying is that the profiles of the six cultures or 25 dependent variables are significantly different.

The main effect for Job was significant only in the analysis of the traits deemed important for the success of a top manager. Finance, personnel, and sales managers yielded different profiles of traits which they considered most and least important for the success of a top manager in doing his job well.

The most appropriate comparisons lie in the culture by Job interactions in the three analyses. Let us highlight each culture and functional specialty in turn. Dutch-Flemish finance managers considered "honest" essential for success as a first-line foreman. Personnel managers from all cultures were generally similar in their ratings of all traits, with the exception of Dutch-Flemish personnel managers' ratings of "cultured" (.19). They almost unanimously considered it least important for success as a top manager, while personnel managers from the other three cultures rated it much higher. Dutch-Flemish sales managers considered the traits "steady" and "honest" essential for success as a first-line foreman.

Northern European finance managers considered "cultured" important for success as a top manager, and "honest" most important for success as a first-line foreman. Sales managers thought "cultured" vital for success as a top manager, "steady" as important for success as a first-line foreman, and "honest" unimportant for success as a first-line foreman. Sales managers from all other cultures rated this trait very high.

Finance, personnel, and sales managers from the Latin countries all felt that the trait "cultured" was most important for success as a top manager. Finance, and especially sales managers felt that "honest" was

necessary for success as a first-line foreman.

Anglo-American managers are noteworthy with regard to two traits. Finance, personnel, and sales managers felt (.74, .58, and .50 respectively) that the trait "cultured" was not at all important for success as a top manager. They felt however, that the trait "honest" was highly significant for success as a first-line foreman.

It would appear that we cannot generalize about the effects of functional specialty across cultures. Heller and Yukl (1969) speculated that the differences in decision styles are most likely related to the nature of the task performed by the manager's department. The degrees of freedom available to managers in the tasks performed in the finance and production departments are probably fewer than in the case of the relatively unprogrammed jobs in the personnel and "general" management fields. Also, there is evidence that production divisions are under greater pressure than non-production divisions (Fleishman, Harris, & Burt, 1955). As mentioned earlier we did not find such clear cut differences in decision styles, however, this explanation by Heller and Yukl may give us a clue as to why managers from the same functional specialty in different cultures see different traits necessary for success at different organizational levels. Perhaps job constraints in the three functional specialties vary from culture to culture. This is an interesting hypothesis which has not yet been tested. It may help to explain the results of Hypothesis 3.

It must be emphasized that if all six cultures could have been included in the multivariate analyses it is highly likely that the Japanese and Indian managers would have added further heterogeneity to the results. Such a large scale investigation now appears warranted by the present findings.

TABLE I

REPORTED SATISFACTION OF SUBORDINATES FOLLOWING MEETINGS TO MAKE
DECISIONS WITH PARTICIPATIVE AND DIRECTIVE SUPERVISORS

<u>Culture of Managers</u>	<u>Percent of Subordinates Who Were Most Satisfied in Decision-Making Meetings with Participative Supervisors</u>
(N=65) 28 <u>Dutch-Flemish</u> (33 Dutch, 20 Flemish, 12 Europeans in Belgian Congo)	64.7%
(N=116) 50 <u>Northern Europeans</u> (34 Danes, 12 Norwegians, 27 Swedes, 25 Austrians, 2 West Germans, 16 German Swiss)	56.4%
(N=202) 97 <u>Anglo-Americans</u> (115 British-Northern Irish, 72 Americans, 15 Australians)	53.1%
(N=179) 78 <u>Latins</u> (8 Brazilians, 46 Columbians, 10 French, 54 Italians, 11 Spanish, 33 French Swiss, 17 Walloons)	52.6%
(N=28) <u>Japan</u>	50.0%
(N=37) <u>India</u>	29.4%

$$x^2=12.306 (p<.05)$$

TABLE 2

REPORTED SATISFACTION OF SUPERIORS FOLLOWING MEETINGS TO MAKE DECISIONS WITH INVOLVED AND UNINVOLVED SUBORDINATES

<u>Culture of Managers</u>	<u>Percent of Supervisors Who Were Most Satisfied in Decision-Making with Uninvolved Subordinates</u>
16 Japanese	18.1%
34 Dutch-Flemish	21.4%
62 Northern Europeans	28.0%
93 Latins	28.2%
98 Anglo-Americans	29.8%
17 Indians	75.0%

$\chi^2=77.22$ ($p<.001$)

TABLE 3

REPORTED SATISFACTION FOLLOWING MEETINGS TO MAKE DECISIONS WITH PARTICIPATIVE/DIRECTIVE SUPERIORS AND INVOLVED/UNINVOLVED SUBORDINATES

<u>Functional Specialty</u>	<u>Percent of Subordinates Most Satisfied with Participative Supervisors</u>	<u>Percent of Superiors Most Satisfied With Uninvolved Subordinates</u>
98 Finance	44.4%	26.5%
168 Sales	50.5%	27.5%
361 Personnel	57.06%	30.5%

$z=2.302$ ($p<.05$) $z=1.44$ (NS)

$\chi^2=9.113$ (NS)

TABLE 4

MULTIVARIATE ANALYSIS OF VARIANCE OF 25 TRAITS DEEMED IMPORTANT FOR THE SUCCESS OF A MIDDLE MANAGER IN DOING HIS JOB WELL

Source	df	F	P
Culture	3	12.807	< .0001
Job	2	1.165	NS
Culture by Job	6	1.058	NS
Error	541		

TABLE 5

MULTIVARIATE ANALYSIS OF VARIANCE OF 25 TRAITS DEEMED IMPORTANT FOR THE SUCCESS OF A TOP MANAGER IN DOING HIS JOB WELL

Source	df	F	P
Culture	3	9.015	< .0001
Job	2	1.375	< .045
Culture by Job	6	1.266	< .017

TABLE 6

MULTIVARIATE ANALYSIS OF VARIANCE OF 25 TRAITS DEEMED IMPORTANT FOR THE SUCCESS OF A FIRST-LINE FOREMAN IN DOING HIS JOB WELL

Source	df	F	P
Culture	3	8.966	< .0001
Job	2	1.293	NS
Culture by Job	6	1.106	NS
Error	541		

	LATINS	N. EUROPEANS	A.- AMER.	DUTCH-FLEMISH
FINANCE	1.3	1.2	.74	.75
PERSONNEL	1.3	1.0	.58	.19
SALES	1.3	1.4	.50	.75

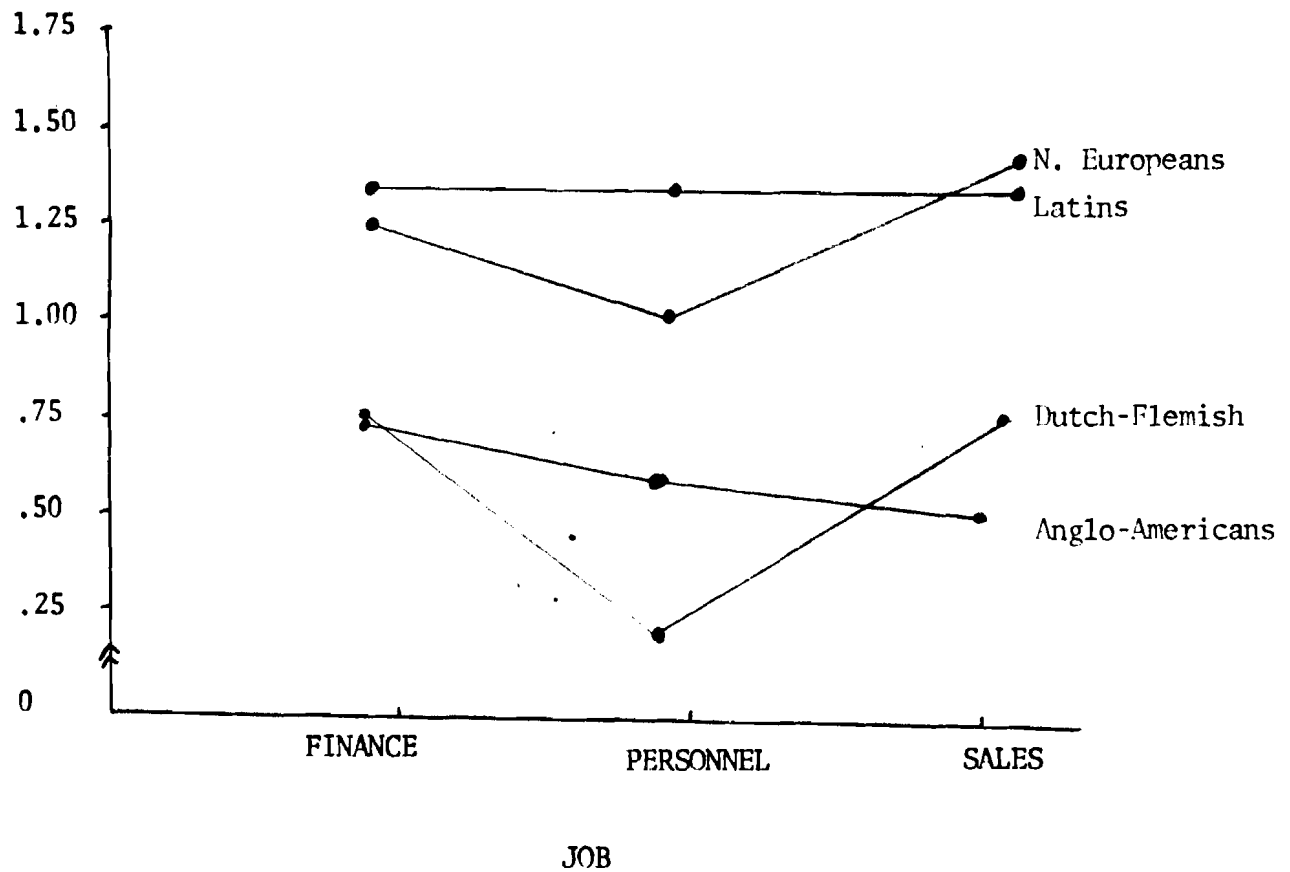


Figure 1. Univariate interaction of Culture by Job for the trait "cultured".
in analysis of variance of top managers.

	LATINS	N. EUROPEANS	A.-AMER.	DUTCH-FLEMISH
FINANCE	1.06	1.17	1.13	.50
PERSONNEL	1.13	1.04	1.01	.96
SALES	.97	1.30	1.15	1.50

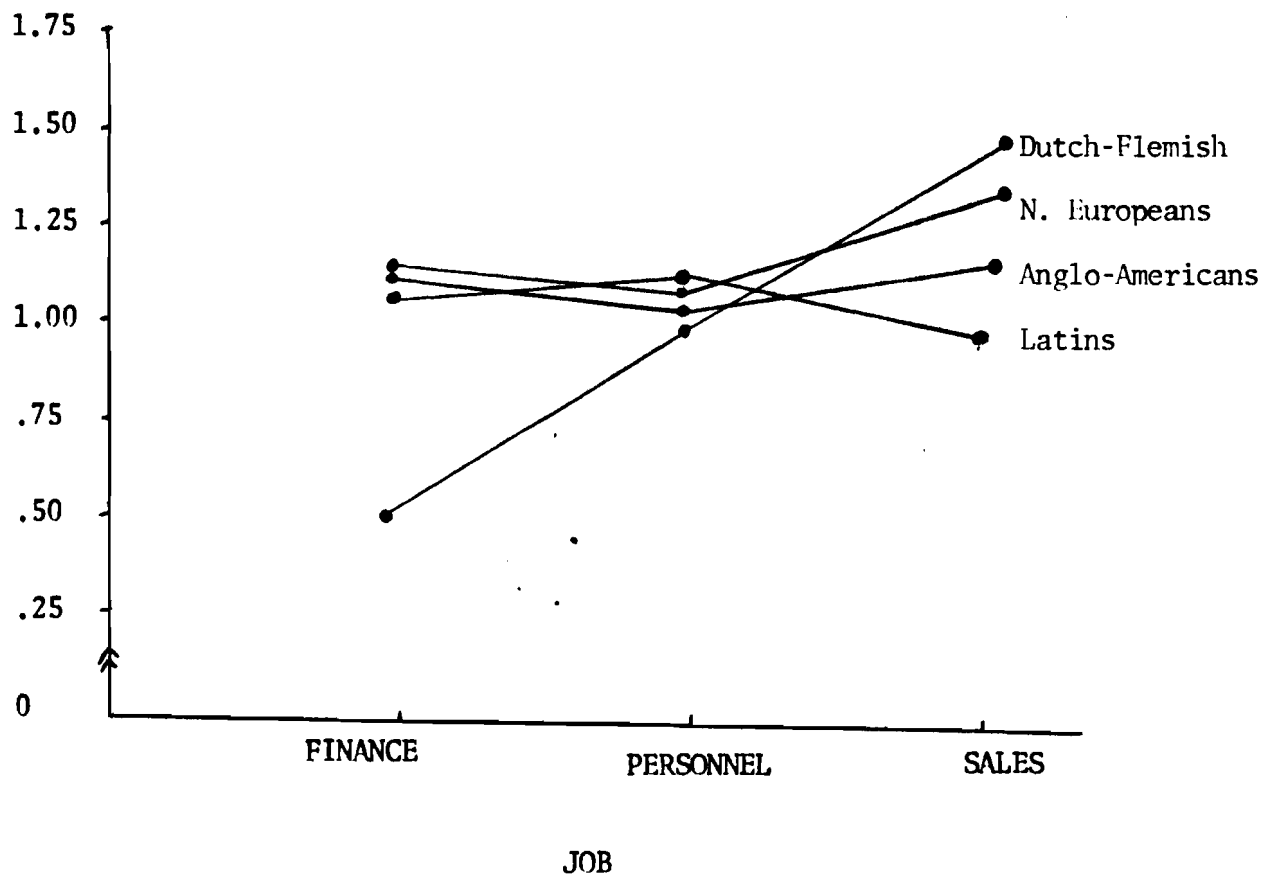


Figure 2. Univariate interaction of Culture by Job for the trait "steady" in analysis of variance of first-line foremen.

	LATINS	N. EUROPEANS	A.- AMER.	DUTCH-FLEMISH
FINANCE	1.26	1.50	1.33	1.50
PERSONNEL	1.17	1.10	1.24	1.38
SALES	1.46	.95	1.36	1.50

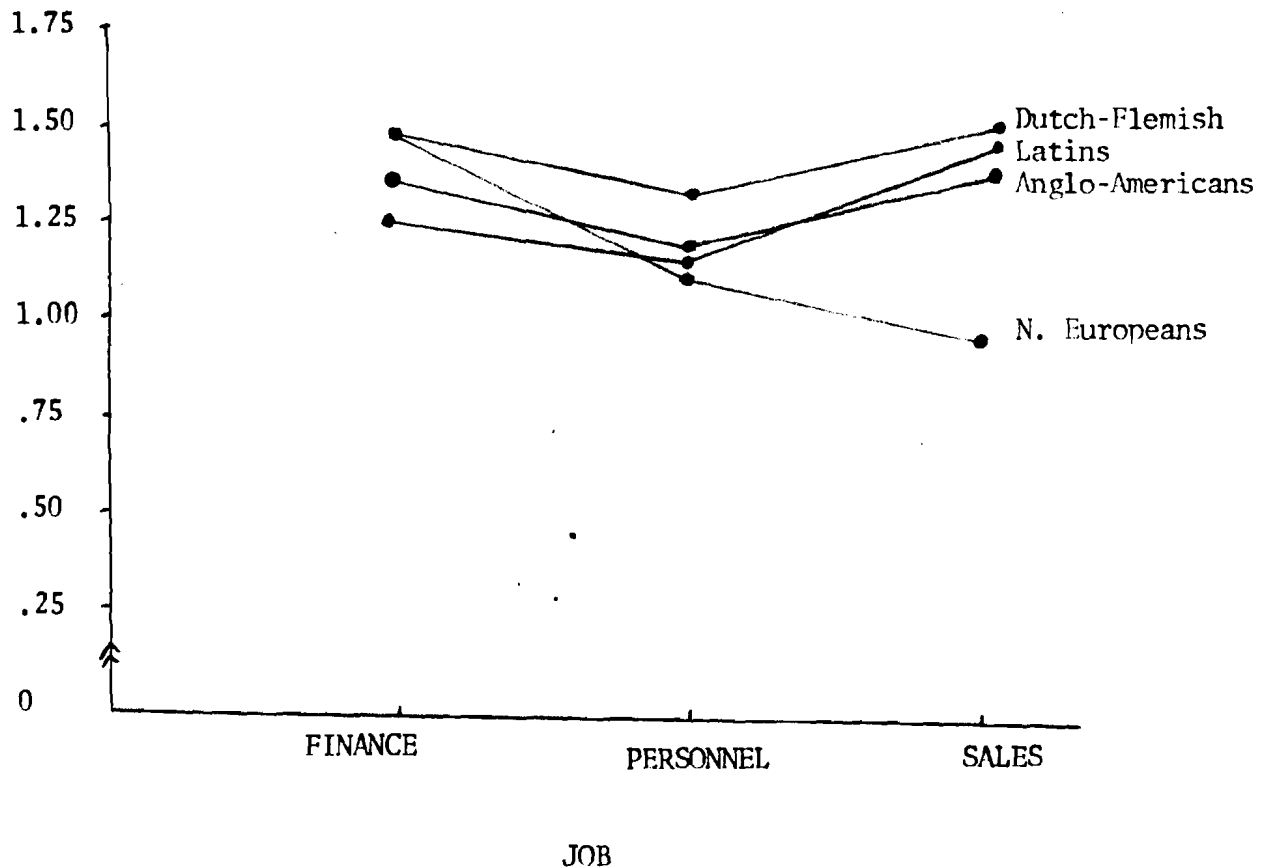


Figure 3. Univariate interaction of Culture by Job for the trait "honest" in analysis of variance of first-line foremen.

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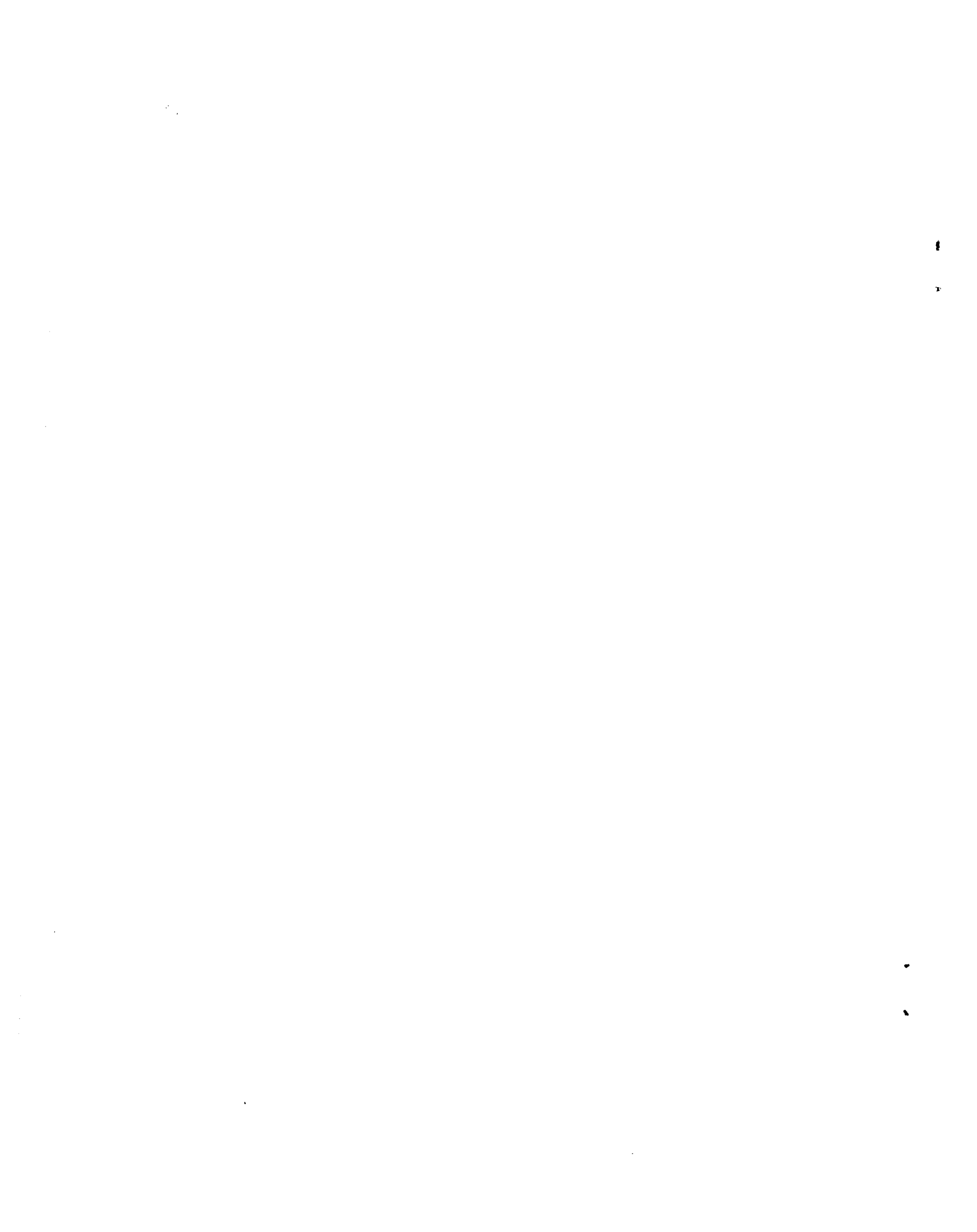
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