Order of Presentation at Trial*

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The order of evidence in an adversary proceeding has an important effect upon the final determination of guilt or innocence. This effect is complicated by the fact that the adversary process is ordered in two distinct ways: a "gross order" of presentation by each party; and, within this gross order, an "internal order" for the presentation of each party's case.

Gross order is determined by statute and judicial decision for the three parts of the traditional adversary process: opening statements, presentations of evidence, and closing arguments. The prosecution or plaintiff usually has the right to make the first opening statement, present evidence first, and make both the first and the final closing arguments. The usual justification for this ordering is that the party with the burden of proof should have the advantage of making the first and last presentation.¹

There is, however, no established internal order for adversary proceedings; such ordering is typically left entirely to the participants. Nevertheless, most practitioners normally save their strongest, most convincing evidence for last. The usual justification for this strategy is that it is the most dramatic way to present one's case and that the jury or fact-finder will remember the strongest evidence more vividly. One trial specialist suggests, for example, that the order of witnesses be arranged to "lead up to a climax with no anticlimax."²

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1. See, e.g., Judge Blumenfeld's opinion in *U.S. ex rel. Parsons v. Adams*, 386 F. Supp. 340 (D. Conn. 1971), in which he states that although it could be assumed that the Connecticut practice of permitting the prosecution in criminal trials to both open and close final argument gives the prosecution a potential advantage, the usual justification for the practice is that the party with the burden of proof should have the advantage of opening and closing final argument. This practice, adopted by most jurisdictions, may constitute a minor defect in the otherwise ideal ordering suggested by this Article. See p. 225, Figure 3.

2. McKelvy, *Presentation of the Case in Chief*, in *SUCCESSFUL JURY TRIALS* 187, 192 (J. Appleman ed. 1952).

But despite such advice, the choice of both gross and internal order rests upon assumptions which are as yet unsubstantiated. While the effect of order on decision making has attracted the attention of psychological researchers, their work has little direct application to an adversary legal process: they have focused on either external *or* internal order; in the adversary model, the two factors always exist in combination. Moreover, few of these studies have dealt with legal material and none has been designed to include the essential characteristics of the legal fact-finding process. The gravity of this flaw is demonstrated by recent psychological investigations which conclude that any advantage achieved from order is dependent upon such factors as the nature of the material presented, the traits under consideration, the timing of the presentation, and the instructions given to the decision-makers.³

This Comment reports an experiment designed to suggest the effect of order in an adversary legal process. The experiment combines gross and internal ordering in a setting incorporating the essential characteristics of legal fact-finding.

I. Method

The experiment used a hypothetical case which could arise in either a civil or criminal context.⁴ The case as explained was comprised of fifty brief factual statements, divided equally into "lawful" and "unlawful" bits of evidence. Through the prior use of scaling procedures,⁵

3. For a recent survey of the psychological research on order of presentation see E. JONES & G. GOETHALS, *ORDER EFFECTS IN IMPRESSION FORMATION: ATTRIBUTION CONTEXT AND THE NATURE OF THE ENTITY* (1971). Some of this prior research is summarized with reference to the legal process in Lawson, *Experimental Research on the Organization of Persuasive Arguments: An Application to Courtroom Communications*, 1970 L. & THE SOC. ORDER 579, 597-608.

4. The case was explained by a brief summary: Adams (the defendant) and Zemp have been close friends for years. Recently they began to gamble heavily together and, as matters became involved, they met at a tavern to discuss their relationship. After a period of conversation Zemp knocked Adams to the floor and threw an object in his direction. Adams responded by stabbing Zemp in the stomach with a piece of glass. The law provides that it is unlawful to use more force in repelling an attack than a reasonable person would believe necessary in the same or similar circumstances.

5. In a pre-test, eighty-six facts about the case were divided by undergraduate subjects into two categories, lawful and unlawful. Within these categories, the facts were further divided into nine sub-classes to provide equal scale intervals on the strength dimension within each of the two scales. Facts were selected for use if the subjects designated them lawful (or unlawful) at least seventy-five per cent of the time and if, within a given level of strength, they were rated at that level with the smallest variance. In order to insure that the units of strength (the degree to which the data influence the subjects) would be the same across the strength dimensions for the two types of facts, a more refined scaling technique was carried out on the selected fifty facts. Utilizing the procedure described by Young and Cliff, both lawful and unlawful facts were compared with the same set of standard facts. See F. Young & N. Cliff, *Interactive Scaling with Individual Subjects* (THE L.L. THURSTONE PSYCHOMETRIC LAB. REP. NO. 94, 1971). This permitted the scaling of the lawful and the unlawful facts on the same weak to strong continuum so that a unit of strength in the lawful presentation could be equalized with a

the impact of each "lawful" bit on a subject (acting as typical juror) was matched by an "unlawful" bit tending in the opposite direction. Subjects were instructed to listen to the evidence and then decide whether the defendant's acts were lawful or unlawful.⁶

Into this setting the two variables of gross and internal order were introduced: In the gross order variable, either the unlawful facts were presented first, followed by the lawful facts, or vice versa; in the internal order variable all possible combinations of climactic and anticlimactic orderings within the two opposing presentations were compared.⁷ Variations attributable to the individuals presenting the evidence were controlled for by alternating roles.⁸

The effects of gross and internal ordering were measured by the judgments of the subjects as to whether the defendant's action was lawful or unlawful, and their certainty about those judgments. Each side presented its twenty-five bits of evidence five at a time. After each set of five bits had been presented, the subjects were asked to indicate the extent to which they *currently* considered the defendant's actions to be lawful or unlawful by checking a nine-point scale (one being unlawful, nine being lawful). After the last set of facts, the subjects were asked to indicate their final opinions on the case and their degree of certainty.⁹

unit of strength in the unlawful presentation. Both of these scaling procedures produced a distribution of lawful facts whose average strength was not statistically different from that of the unlawful facts. Further, the two distributions were not statistically different in their variability; in fact, the two distributions were remarkably similar. The fifty facts selected for use are on file with the *Yale Law Journal*.

6. Each experimental session began when a group of undergraduate students reported to a large conference room at a specified time. A long table was situated at the front of the room, and two third year law students sat at opposite ends of the table facing each other. The experimenter, a graduate student in psychology, sat at the center of the table facing the participating undergraduate students. Each subject was given an envelope containing the case summary and a series of questionnaires for use in the test session.

7. The gross order comparison was created after the completion of the standard preliminaries. The two law students were introduced to the subjects as the attorneys for the defense and prosecution. These terms were adopted to differentiate the roles for the subjects but not to suggest a criminal as opposed to a civil trial. In one-half of the sessions, the subjects were told by the experimenter that the defense attorney would present his evidence first and that the prosecution attorney would follow; this procedure was then carried out. In the other sessions, the reverse order was announced and followed throughout the session. In all sessions the appropriate attorney stood and read aloud the lawful or unlawful facts, and then the second attorney presented his case in the same manner.

The internal ordering variable was introduced by having one or both of the two attorneys present their evidence in either the climactic (weak to strong) or anticlimactic (strong to weak) order.

8. To keep any difference between the two students at a minimum, each dressed as he might for a court appearance and spoke in a matter-of-fact voice. The two attorneys did not know prior to each session which side they would be representing or what gross and internal sequences would be followed.

9. The terminal questionnaire also asked subjects how pertinent they thought the facts were and whether they detected a trend in either presentation.

II. Results

The subjects' final judgments are expressed in means in Table 1. Larger means indicate results more favorable to the defense; smaller means, more favorable to the prosecution.

Table 1 suggests that gross order does make a difference and that the second presenter is in the more advantageous position. In three of the four cases, the party going second obtained more favorable results. Analysis of these data demonstrates that these column differences are highly significant ($p < .001$).¹⁰

Table 1 also suggests important differences resulting from internal ordering. Comparison of the appropriately paired rows¹¹ reveals that a climactic order in the *first* presentation produced substantially lower final means when the prosecution went first (column two). When the defense went first (column one), however, there was no corresponding favorable effect to the defense; indeed, there was a mildly unfavorable trend: Both climactic ordered means are slightly lower than their paired means. Statistical analysis indicates that this differential effect of internal order favorable to the climactic order (only when the prosecution went first) is highly significant ($p < .001$). As to *second* presen-

Table 1. Mean terminal judgments. The higher the score the more lawful the case was judged.

Internal Order	Gross Order	
	Defense First Prosecution Second	Prosecution First Defense Second
First Presentation weak to strong Second Presentation strong to weak	3.94(18) ^a	3.73(15)
First Presentation weak to strong Second Presentation weak to strong	2.84(19)	4.38(16)
First Presentation strong to weak Second Presentation strong to weak	4.20(15)	5.84(19)
First Presentation strong to weak Second Presentation weak to strong	3.50(20)	6.77(17)

^a Number of subjects in parentheses.

10. A difference is here considered "significant" when an appropriate statistical analysis yields a result which would occur by chance less than five times in one hundred instances, written as " $p < .05$." Smaller "p" values give even more assurance the difference was not the result of chance.

11. For *first presentations* it is necessary to compare the means in such a way as to hold constant differences within second presentations. Comparisons by *column* of the mean in row one with the mean in row three (in which the second presentation was anticlimactic) and row two with row four (in which the second presentation was climactic) meet this requirement. These comparisons suggest that internal order within first presentations makes a marked difference only for the prosecution and that climactic ordering is the more effective.

tations the data appear to indicate that a climactic order is effective for both prosecution and defense.¹² Statistical analysis demonstrates the internal order difference (generally favorable to the climactic order) to be only marginally significant ($p < .052$) and not significantly different for defense and prosecution presentations.

Subjects' preliminary judgments, after they had heard different amounts of evidence during the course of the presentations, were plotted as shown in Figures 1 and 2.

Figure 1 depicts the developing effect of the evidence over the entire first presentations; it then traces, controlling for the effect of

Fig. 1. Mean judgments based on internal order of first presentations, controlling internal order during second presentations.

12. For *second presentations*, it is necessary to compare means in such a way as to control for differences within first presentations. A comparison *by column* of row one with row two (in which the first presentation was climactic) and row three with row four (in which the first presentation was anticlimactic) meets this requirement.

internal order within second presentations, the continued effect of the first presentation internal order through the second presentation to a final decision.¹³

Particularly noteworthy is the wide divergence over the first twenty-five facts between the climactic and anticlimactic curves when the prosecution presented first.¹⁴ The two subsequent defense presentations also resulted in significantly different trends over time ($p < .003$). When prosecution facts were presented in an anticlimactic order, the defense presentations following them produced a dramatic increase over time ($p < .001$); the defense facts following a prosecution case presented in a climactic order produced a significant (though less steep) increase ($p < .001$).¹⁵ By contrast, when the defense went first, the climactic and anticlimactic curves are largely identical. Not surprisingly, this similarity carried through to the final judgments; there were no significant differences in the trends of the prosecution presentations following the two internal orders when defense presented first.

Figure 2 shows the developing effect of internal order over the entire *second* presentations, controlling for the effect of internal order within the preceding first presentations.¹⁶ It reveals that differences in the internal order of the prosecution's case caused a divergence in preliminary judgments when the prosecution presented evidence second, similar to the divergences noted in Figure 1 when the prosecution went first.¹⁷ However, in contrast to the lack of divergence in preliminary judgments when defense presented first, as shown in Figure 1, Figure 2

13. Thus, in Figure 1, the point described by coordinates right 5 and up 2.07 shows that when a climactic prosecution presentation came first, after the fifth group of five facts had been presented, the mean judgment of the subjects was 2.07, very favorable to the prosecution.

14. The curvilinear trends of both presentations are evident in Figure 1. These trends are significantly different from one another ($p < .001$) in that the climactic order produces a trend which is convex, whereas the anticlimactic order produces one which is concave.

15. A further trend analysis revealed that the defense presentation following the climactic prosecution presentation resulted in a significant quadratic trend ($p < .001$). The defense facts following the anticlimactic prosecution presentation produced a similar quadratic trend but one that was only marginally significant ($p < .082$).

16. Time five represents the state of opinion at the conclusion of the first presentations and thus constitutes the starting point for the second presentations. Figure 2 is read in the same way as Figure 1. For example, in Figure 2, the point described by coordinates right 9 and up 4.05 shows that when climactic prosecution presentations came second, after the ninth set of five facts the mean current judgment of the subjects is 4.05, mildly favorable to the prosecution.

17. Both prosecution presentations in the last five trials reveal linear trends that are significantly different from each other ($p < .011$). Further analysis indicates that the anticlimactic prosecution presentation has a significant concave quadratic trend ($p < .001$) and, in fact, is significantly different ($p < .001$) from the climactic order, which has a significant convex quadratic trend ($p < .007$).

Fig. 2. Mean judgments based on internal order of second presentations, controlling internal order during first presentations.

reveals a definite divergence between the two curves for defense presentations, though one less impressive than the prosecution effect.¹⁸

III. Discussion

The results of this experiment suggest that in a legal setting the impact of the final bits of evidence, in both gross order and internal order, is pervasive: In gross order, the side going second is strongly

18. Both the climactic and anticlimactic defense presentations resulted in significant linear trends ($p < .001$), but these linear trends were not significantly different from one another. Similar to the prosecution data, the anticlimactic order of the defense presentation produces a convex quadratic trend ($p < .001$). This significant quadratic trend contributed to the significant difference revealed by quadratic contrast analysis between the two defense orders ($p < .007$); the climactic defense order produced no significant quadratic trend.

advantaged; internal order favors strong evidence occurring toward the end of the presentation except when the defense presents first.

In seeking to account for the gross order results, it is important to examine why facts presented *first* have less impact in a legal setting than elsewhere. First impressions normally have strong impact when individuals receive information about relatively stable characteristics of others, such as attitudinal and personality dispositions and abilities.¹⁹ However, the determination of whether another person has performed an unlawful act entails judgments not on permanent characteristics but rather on specific events. Thus the legal inquiry may reduce the natural impact of this type of early information.²⁰ Another circumstance thought to strengthen early impressions is a finding of an inconsistency between earlier and later information.²¹ Once an early impression is formed, later inconsistent information is often "discounted" because the recipient of the information has relied on the first impression. However, the recipient of the information presented by each party in an adversary process knows that such information has been screened by the advocate and is thus plainly incomplete. Luchins²² has shown that by forewarning subjects of the imminence of additional information, the impact of early information is suppressed. Thus, when fact-finders know that early information is imperfect and that contrary information will follow, first impressions are not so strong that later information will be discounted. Similarly, early information presented in a legal setting is not likely to produce the strong bias that may in other settings lead to the "assimilation" of subsequent information.²³ Moreover, even if fact-finders enter the case with a strong

19. See Jones, Rock, Shaver, Goethals & Ward, *Pattern of Performance and Ability Attribution: An Unexpected Primacy Effect*, 10 J. OF PERS. & SOC. PSYCH. 317 (1968). Subjects were found to "place greater weight on the first few clues about ability than on subsequent information . . ." *Id.* at 336.

20. This statement may not always be true. In E. JONES & R. NISBETT, *THE ACTOR AND THE OBSERVER: DIVERGENT PERCEPTIONS OF THE CAUSES OF BEHAVIOR* (1971), it is hypothesized that there is a "pervasive tendency" for observers to attribute the causality for an actor's behavior to stable dispositional factors. In the legal setting, this means that decision-makers would be inclined to attribute lawful or unlawful behavior to moral qualities inherent in the defendant.

21. See Anderson & Jacobson, *Effect of Stimulus Inconsistency and Discounting Instructions in Personality Impression Formation*, 2 J. OF PERS. & SOC. PSYCH. 531 (1965); cf. Hendrick & Costantini, *Effects of Varying Trait Inconsistency and Response Requirements on the Primacy Effect in Impression Formation*, 15 J. OF PERS. & SOC. PSYCH. 158 (1970).

22. Luchins, *Primacy-Recency in Impression Formation*, in *THE ORDER OF PRESENTATION AND PERSUASION* (C. Hovland ed. 1957).

23. See Thibaut & Ross, *Commitment and Experience as Determinants of Assimilation and Contrast*, 13 J. OF PERS. & SOC. PSYCH. 322 (1969). In any case, the later information in legal disputes is likely to be too discrepant from the earlier information to permit assimilation. Cf. E. JONES & G. GOETHALS, *ORDER EFFECTS IN IMPRESSION FORMATION: ATTRIBUTION CONTEXT AND THE NATURE OF THE ENTITY* (1971).

bias toward the side presenting first, the adversary system is designed to counter such biases.

Indeed, it appears that in legal settings it is the material presented first which is discounted. Sears²⁴ has demonstrated that fact-finders exposed to only one side of a case (as compared with those exposed to both sides) made less extreme judgments on the relative merits of the presentation. This suggests that after having heard only the first presentation, decision-makers in a legal setting will reserve judgment until they have heard the remaining evidence. Moreover, Sears found that, where subjects who had heard both sides of the case were approximately equally interested in hearing additional information favoring one or the other party, those who had heard only one side were not as interested in receiving further information supporting that side but rather preferred to hear information favoring the opposition. It is this posture of legal fact-finders, with their suspension of commitment and heightened receptivity to the subsequent presentation, that may favor the party going second. Such effects are further promoted, of course, by a sharpened recall of the more recently presented evidence.

As to internal order, strong evidence presented late in the argument (as in the climactic order) carries greater weight than that which is presented early (as in the anticlimactic order), particularly within the second presentations. It is only when the defense presents first that the climactic order carries no discernible advantage. This may be because in legal fact-finding greater *weight* is given to discernible differences in the strength of evidence presented by the advocate of guilt than to equally discernible differences in the strength of evidence presented by the advocate of innocence. Because "prizes" are not awarded for increasing evidence of innocence but, rather, graduated penalties are routinely calibrated to increasing evidence of guilt,²⁵ fact-finders in a legal setting may naturally be expected to place most weight on differences in the strength of evidence of malfeasance.

What remains unclear is the presence, however weak, of internal-order effects during the second presentation by the defense. One possible explanation is that second presentations by the defense were by definition preceded by presentations by the prosecution, during which the fact-finders weighed prosecution evidence. It is conceivable that this prior experience of giving differential weight to weak and strong facts presented by the prosecution may have so sensitized the subjects

24. Sears, *Opinion Formation and Information Preferences in an Adversary Situation*, 2 J. OF EXP. SOC. PSYCH. 130 (1966).

25. For a general discussion of this pervasive condition in Western culture, see L. FULLER, *THE MORALITY OF LAW* 30-32 (2d ed. 1969).

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to such differential weighing that they carried the practice into the succeeding presentation by the defense. What the fact-finders would not spontaneously do when the defense presented first, they were prompted to do when it was presented second.

These gross-order phenomena can be expected in all adversary fact-finding settings involving legal materials. The internal-order phenomena can be expected in all criminal cases, where guilt is always an issue, and in most civil cases where, directly or indirectly, the question of fault or responsibility is typically involved.

IV. Conclusion

The results of this experiment suggest: (1) It makes a difference whether one goes first or second in the adversary presentation of legal

Fig. 3. Mean judgments obtained in ideal condition: prosecution first, weak to strong; defense second, weak to strong. Note: initial and terminal judgments in the other seven conditions are indicated by ticks.

materials, and the second position is the more advantageous; (2) the ordering of weak and strong elements within presentations also produces a difference in results, and the weak to strong (climactic) order is the more effective. But this second finding is true regardless of gross order only for the plaintiff or prosecution; the climactic order is advantageous for the defense only within second presentations and there only to a relatively minor degree.

Assuming that the ideal order for adversary fact-finding is a sequence of evidence which eliminates any advantage gained solely because of order, these two findings suggest an optimal sequence for an adversary system: The advocate asserting guilt or fault should go first and present his case in a climactic order; the advocate defending should follow and also present his case in a climactic order. Both advocates are thus given effective resources: This sequence gives a gross order advantage to the defense, offset by the climactic order advantage given to the preceding prosecution or plaintiff presentation. One of the groups in the experiment heard the hypothetical case in this ideal sequence, and Figure 3 shows the high degree of balance achieved. This result suggests the value of the traditional adversary system in generating balanced judgments by affording both parties fair access to their most effective resources.

The system, with its traditional gross order for opening statements and the presentation of evidence (prosecution or plaintiff first) provides the ideal order as long as both advocates follow their self-interest and present their evidence in a climactic order. The traditional adversary trial thus appears remarkably well arranged to neutralize the effects of order and thus maintain the fact-finding process relatively free of this powerful yet legally irrelevant influence.