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## Homogeneity of Moral Judgement? – Apprentices Solving Business Conflicts

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# **HOMOGENEITY OF MORAL JUDGEMENT? – APPRENTICES SOLVING BUSINESS CONFLICTS**

## **Abstract**

In an ongoing longitudinal study which started in 1994 we are examining the moral development of business apprentices (sensu Kohlberg). The focal point of this project is a critical analysis of Kohlberg's thesis of homogeneity, according to which people should judge every moral issue from the point of view of their «modal» stage (i.e. the most frequently used stage of moral reasoning) regardless of any situation-specificity. Empirical data - even Kohlberg's own -, however, show that an individual's judgements are usually spread around her/his modal stage. This is not necessarily due to measurement error but may also be interpreted as a situation-specific variation which could be described by the hypothesis of «moral segmentation».

In this article we present results on the status of moral development of apprentices in the business context (within different types of situations). Contrary to Kohlberg's theory, our results seem to support the hypothesis of segmentation. The data reflect a great amount of intra-individual variability unaccounted for by the concept of “structured wholeness”.

## **1 Introduction: Kohlberg's hypothesis of structured wholeness of moral judgements**

"Truly moral" people are often described as staunch supporters of their view of justice and stoic persons, who never go back on their principles. However, according to Kohlberg's theory, everybody - even a swindler or an egoist - could be ascribed such qualities, in that people are generally assumed to apply usually one and the same moral principle, whatever the case or the specific situation.

Following Piaget, it is one of Kohlberg's central hypotheses that stages of moral development constitute so-called "structured wholes", i. e. they are supposed to represent underlying organizations of thought which account for cross-situational consistency of moral judgement (Kohlberg, 1984, p. 14). Thus, the individual will consider any moral problem he or she encounters on the background of his or her currently attained stage-principle. However, as people might actually be proceeding onto the following stage or may have only just overcome their preceding stage, they may - during such a period of transition - make use of two adjacent stage concepts, without violating the theory (cf. Colby/Kohlberg, 1987, vol. I, p. 90).

Although Kohlberg claims empirical confirmation for his postulate of homogeneity (cf. *ibid.*, p. 90), his data do not necessarily support it, because testees in fact often use a variety of stages throughout their dilemma answers within and across different test forms (cf. *ibid.*, pp. 83-90). The empirical evidence that Kohlberg sees in favour of his theory is partly due to the fact that up to 10 % of scores (of the overall number of valid scores) on a certain stage in a dilemma are treated as error (*ibid.*, p. 90). So, if a subject's answers amounted to, say, 60 % on stage 2, 30 % on stage 3 and 10 % on stage 4, the stage 4 scores would not be accounted for. If it had not been for this measurement error convention, combined with the hypothesis of the "structured whole", Kohlberg could perhaps have interpreted his own results in another way. And even if one is inclined to accept the argument of possible measurement errors, the fact that many people make extensive use of two stages at the time is somewhat puzzling, namely, with respect to the transformational model, according to which people's behaviour is expected to "change radically" (cf. Kohlberg, 1984, p. 37) as they move from one stage to another. It could therefore be asked, why so many persons should actually be in a state of transition, whenever they are assessed.

Basically, there are three concepts to explain those *prima facie* unexpected results, the *first* of which is the argument of current stage transition. A *second* possible explanation draws to a differentiation of "moral competence" on the one hand and "moral performance" on the other (or slight context-specific time lags - so-called *décalages*; Colby/Kohlberg, 1987, vol. I, p. 8). The concept of moral performance points to the fact, that persons do not necessarily make use of their „full" competence when answer-

ring a certain dilemma question. It might be objected, however, that there must be special reasons for such a performance below competence. Why should people act like this? Hence, the concept of moral performance can only be valid on specific grounds, which would - in our view - still have to be explicated in more detail. What is more, in order to justify the assumption of an effect of „performance" as opposed to how people can normally perform (putting forth their real competence), it should show up somewhat at random. But if this effect were always connected to the same type(s) of situation(s) or thematic areas, it might perhaps - as a *third* possible explanation - be more adequate to speak of context-related specific moral „competencies", because people then would not seem to be capable of producing higher stage judgements in those contexts. Such a view would also be in line with current approaches in the context of social constructivism (e. g. Gergen, 1985) as well as „situated learning" (cf. Brown/Collins/Duguid, 1989), especially as far as learning is said to be embedded in so-called "communities of practice" (cf. Lave, 1991). Of course, this is not meant as a criterion of validity, but it may be regarded as a sign of plausibility in the light of other theoretical developments.

This third interpretation, which assumes context-bound competencies, is the concept of "moral segmentation", the development of which was stimulated by Rest's (e. g. 1979) databased assumption, that people can and will use different stage-principles in different situations. According to this, moral concepts seem to be acquired "additively", in the sense that the acquisition of a new type of principle would not necessarily imply a transformation of moral cognitive structure (cf. also Colby/Kohlberg, 1987, vol. I, pp. 7-8). Inspired by more empirical evidence from various studies (Althof/Garz/Zutavern, 1988; Nisan, 1986; Senger, 1985; Beck et al., 1996; Lind, 1993) this concept of moral segmentation (that people in fact use different stage concepts simultaneously) has been further developed by Lempert (1982, 1988, 1994) and Beck (1995, 1996a and b). Following Rest (1979, pp. 251-254), the idea behind it is that, as the individual acquires moral concepts stage by stage, he or she acquires a set of moral "schemes" (in terms of the different stage principles), that may each be associated with specific contexts. One of the conceptual problems yet to be solved - apart from questions of how segmentations could manifest themselves internally in the individual's psyche - consists in determining the contextual criteria according to which people construe or delimit their moral segments.

One tentative and fairly general assumption within this frame of reference is that people might apply another moral standard, e. g. in business, than they would in their private lives. We are currently testing this hypothesis in a six-year longitudinal study with apprentices and business people in the insurance industry against Kohlberg's hypothesis of homogeneity.

As for more specific determinants for possible moral segmentations we also examined the question, whether our testees make different judgements - and give different reasons for their judgements - within the business context. Two of our moral dilemmas, which have been contrived as contextual adaptations of the typical Kohlberg-dilemmas, deal with moral problems in business. One is about a within-company social conflict (implying internal social relations between superior and subordinate); the other story has to do with company-client-relations, where an employee in charge of claims on insurance benefits has to make up his mind in a doubtful case, whether he should remit the payment or not.

In this article, we would like to report our first results with respect to this possible segmentation effect within the overall business context. In Section 2 the design of our study is presented and the two dilemma stories in question are outlined. Section 3 deals with the actual results - both on an aggregate level and subject-based - which will be briefly evaluated in Section 4.

## **2 Design**

For the analysis of the above-mentioned segmentation hypothesis a longitudinal design is needed to account for the possibility of stage transitions. Thus, potential segmentations of moral judgement between one field of action and another can possibly be diagnosed over a fairly long period of time, which would rule out the possibility of transitional states. As for the different areas of life we distinguish "family", "friendship", and the two business contexts mentioned already above.

### ***Procedures and instruments***

In 1994 the current six-year longitudinal study with apprentices in the insurance industry began.<sup>1</sup> Then, two classes of a vocational school were assessed with four dilemma questionnaires - one for each of the four areas of life - with open answers analogous to the Sociomoral Reflection Measure (SRM) developed by Gibbs and Widaman (1982). The questionnaires have been and are still going to be re-presented to all insurance apprentices of that school in yearly intervals.

Additionally, sub-samples of each cohort are assessed with the Moral Judgement Interview (MJJ). Those testees who show a rather clear tendency towards segmentation, on the one hand, or whose moral judgement seems to be homogenous across the different questionnaires, on the other hand, are selected for these sub-samples. Interviews are conducted individually and are audiotaped and transcribed for scoring.

In all the four stories we asked the question of what to do and why, varying the circumstances of action as is done in the Heinz-dilemma by Kohlberg (e. g. Colby/ Kohlberg 1987, vol. II, 1-3). As an anchor dilemma, we used Kohlberg's Heinz-story which we categorize as belonging to the family context. (The second dilemma for the non-vocational field focuses on a conflict in friendship.)

In this article we confine ourselves to the two dilemmas that deal with problems in companies: the first of them, as already mentioned, concerns a within-company social conflict implying internal social relations between superior and subordinate (1); the second dilemma concerns an external conflict between company and client (2):

(1) An employee of an insurance company is asked by his superior to forge the sales report in order to raise the amount of commission. The superior needs the money urgently to master private short-term financial problems (*type of value conflict: neutral/positive affiliation vs. law/property*).

Variants on this case (*resp. variants of value conflict situations*):

(a) Does it make a difference if the superior is a fair and cooperative or a ruthless, authoritarian and selfish person (*positive/negative affiliation vs. law/property*)? (b) Does it make a difference if it is not the superior, but a subordinate who asks the employee to forge the sales report (*neutral affiliation vs. law/property*)? (c) The superior begs the employee to conceal an extra pay for the insurance agents and to let him have the money (*positive affiliation vs. law/property*). (d) Should the employee immediately demand repayment of a larger amount of money that he lent to an acquaintance for three years to let his superior have the money (*positive affiliation vs. contract*)? (e) Does it make a difference if the employee gets to know that his superior is in danger of a lethal heart attack (*life vs. law/property*)? (f) Should the personnel manager pronounce himself in favour of the employee's dismissal after finding out the fraud (that he had committed in the knowledge of his superior being in mortal danger) (*justice vs. law*)?

(2) An employee of an insurance company is asked by a widow to prompt the payment of her late husband's life insurance benefits. However, by chance he has information that the deceased husband had already been seriously ill, when he signed the contract without mentioning a special risk. Should the employee retain the information and trigger payment, or should he pass the information on and refuse payment (*type of value conflict: affiliation vs. contract*)?

Variants on this case (*resp. variants of value conflict situations*):

(a) The charming widow lives in poor conditions (*positive affiliation vs. law/property*). (b) The widow appears rather arrogant and claims the immediate payment of the insurance benefits (*negative affiliation vs. law/property*). (c) The widow urgently needs the money to be able to afford an operation of vital importance that will not be paid by her health insurance (*life vs. law/property*). (d) The widow proposes to sign a life insurance contract in her name, if the employee pays the benefits of her husband's insurance. The employee would benefit from this new contract in terms of commission (*law vs. property*). (e) Shortly after subscribing to her new life insurance contract, the widow is offered the same contract by a rival firm at much better conditions. She asks the employee to cancel her contract (*affiliation vs. contract*). (f) Should the personnel manager be lenient with the employee if his "generosity" becomes known (*justice vs. law*)?

Answers are scored according to Kohlberg's own rationale as we intend to get authentic data comparable with that in the original Kohlberg studies (Colby/Kohlberg, 1987, Vol. II). We found the Scoring Manual very helpful in reconstructing the arguments from the exemplary answers listed there and in developing a deeper understanding of the different levels of moral judgement, but its expressiveness seems to be rather limited when applied to colloquial German. Therefore, a special framework based on the English original had to be developed.<sup>2</sup>


### *Sample*

At the beginning of our study, the sample consisted of three classes of a vocational school (see Table I): 29 female and 35 male apprentices. They ranged between 17 and 24 years of age. In 1995 and 1996 we included new classes of students and we will continue doing so for another two years. The students' apprenticeship lasts between 2 years and 3 years, so that the questionnaire sample undergoes a yearly dropout of one class whose apprenticeship ends, while a new class starts.

As we suppose that permanent confrontation with business rules and practices might influence moral judgement, we only refer to testees who had been in apprenticeship for at least 8 months when first assessed.

**Table I: Sample**

	1992 class	1993 class	1994 class	1995 class	1996 class	$\Sigma$
t 1 (1994)	28	19	17	---	---	64
t 2 (1995)	---	7	17	22	---	69
t 3 (1996)	---	---	6	22	23	51

 Testees in apprenticeship for at least 8 months (86 persons)

### **3 Results**

According to Kohlberg's assumption of the structured wholeness of moral stages, each apprentice should apply the same moral principle to both business dilemmas. And even their judgements on the different variants of the two dilemma stories should obey this rule.

In order to test the hypothesis of homogeneous moral judgement, we started with a comparison of the testees' judgements on the level of the so-called "modal stage". This aggregate concept is operationalized as the individual's "favourite", i.e. most frequently used moral principle per dilemma.<sup>3</sup> As a measure of central tendency, it allows that persons might apply principles of different moral stages "within" the dilemma, i. e. to the variants of the original dilemma case.<sup>4</sup>

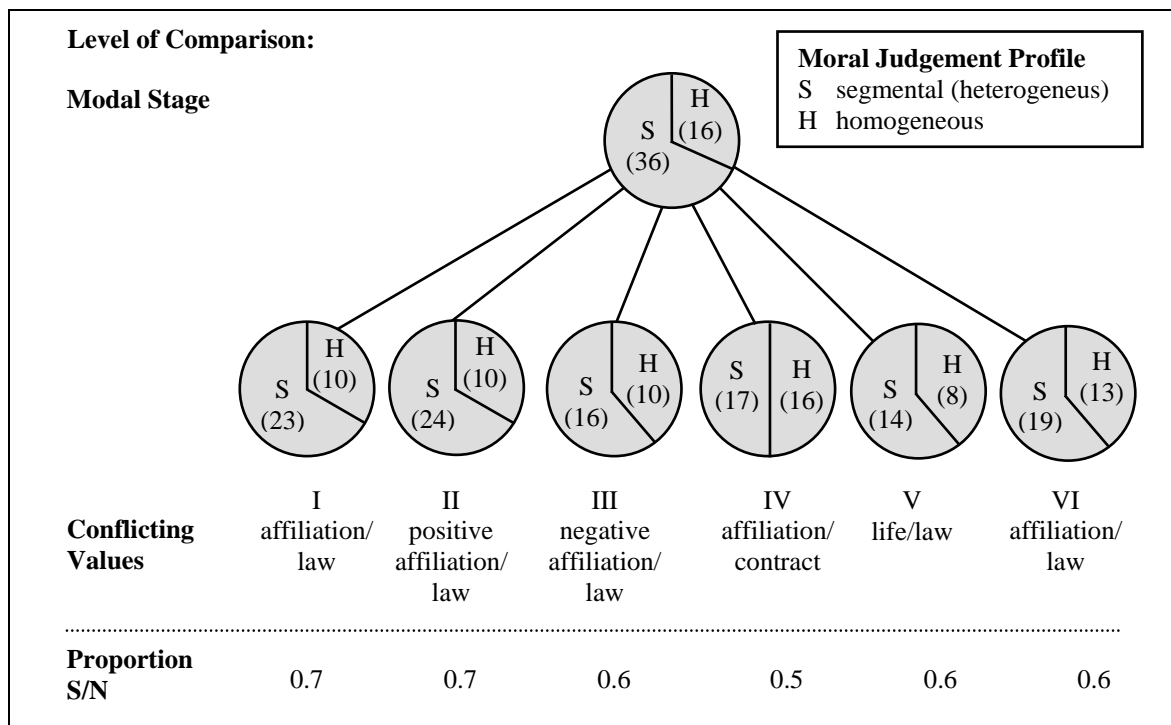
This strategy groups the sample into two sets of persons: the ones who are homogeneous ("H") across two dilemmas and the ones who are heterogeneous ("S" as segmented). As Figure 1 (upper circle) shows, only 16 apprentices belong to the first type ("H"), whereas 36 are classified as heterogeneous ("S"). This first result seems to



confirm our assumption of segmentation at least on the methodological basis of the "modal stage", but it is not yet apparent which situational features stimulate heterogeneous moral judgements and why - on the other hand - other testees use the same stage principles consistently. Before asking for reasons of this result, we now go into more detail by looking at the data on a less aggregated level.

We think this step is important, because the very concept of the "modal stage" might - as a measure - be too large-meshed to portray moral segmentation phenomena. Therefore we now focus directly on the different types of moral conflicts presented by the variants of each dilemma story. In order to examine segmentation more deeply we checked how many of our apprentices actually used several levels of moral judgement "within" the two dilemmas. Figure 1 (lower circles) shows how many of the young employees varied their moral arguments on the two dilemmas depending on single value conflicts.

**Figure 1: Analysis of the consistency of moral reasoning across two dilemmas<sup>5</sup>**

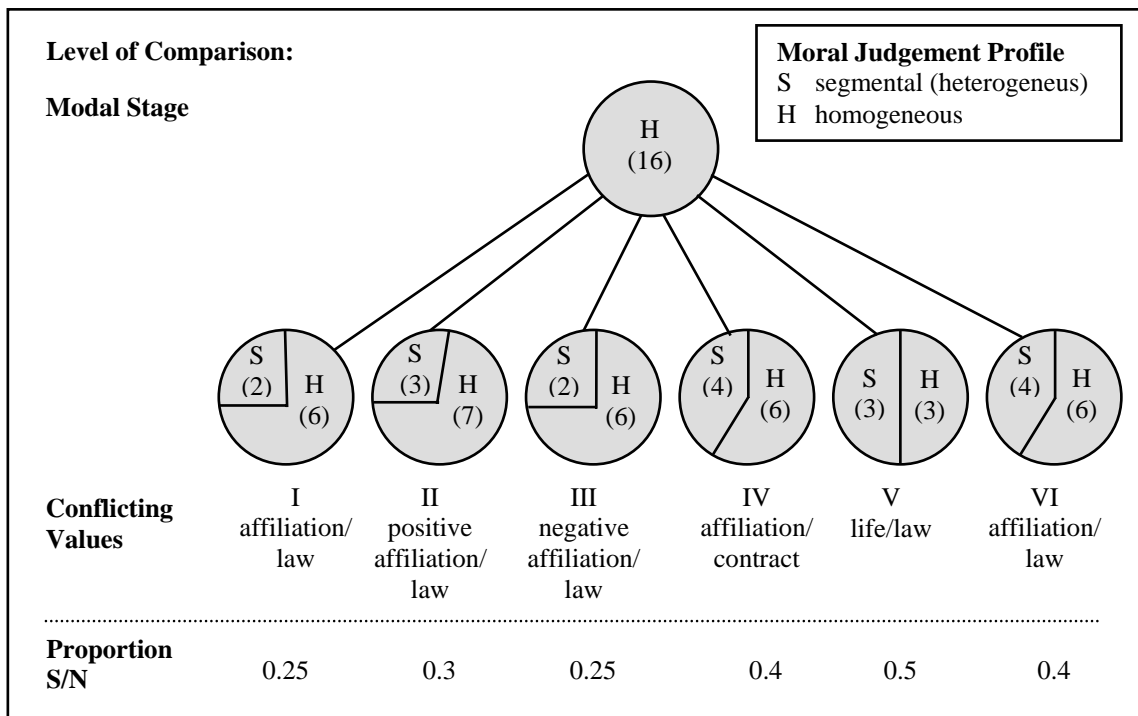


Considering the number of apprentices who use different stage principles on the basis of the conflicting values involved, the proportion of heterogeneous persons on the level of the "modal stage" is just about reflected by the single-issue comparison. No matter which of the two levels of examination is considered, the majority of the apprentices produced heterogeneous moral judgements (proportion S/N > 0.5) - apart from the "affiliation/contract" issue. Despite this fact, the share of segmented moral judgements ranges from 0.5 to 0.7 across the different "moral conflicts". This variation indicates

that the specific modifications of each dilemma might provide additional stimuli which lead to different situational considerations and hence differential judgements.

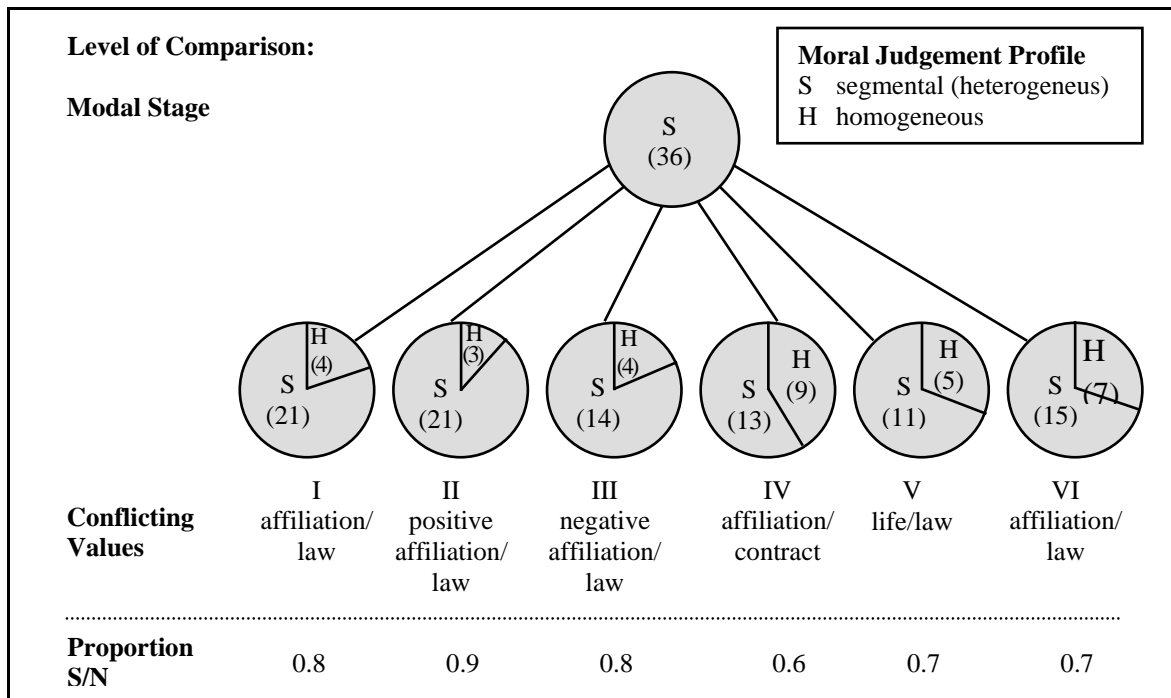
We then examined our data under the aspect of whether heterogeneously/homogeneously judging persons produced heterogeneous/homogeneous moral judgements on the level of "conflicting values". Thus, we had to look not only at the "story" but also at the "value conflict" as factors that possibly influence the choice of a moral principle. In a first step, therefore, we counted the "modally" homogeneous persons varying the stage of moral thinking as for the different value conflicts in question, although they had been assigned the same "modal stage" in both dilemmas (see Figure 2).

**Figure 2: Analysis of the consistency of moral reasoning of "homogeneous" testees across two dilemmas<sup>6</sup>;**



Complementarily, we wanted to know whether the persons who referred to different moral stages (heterogeneous) across dilemmas on the level of the "modal stage" argued consistently using different moral principles in the comparable issues of both dilemmas (see Figure 3).

**Figure 3: Analysis of the consistency of moral reasoning of "heterogeneous" testees across two dilemmas<sup>7</sup>**



As can be seen, most of the homogeneous persons - in terms of the modal stage - also showed an intra-individual tendency towards homogeneity (see Figure 2) of moral reasoning. Testees reasoning homogeneously on the level of "modal stage" used the same moral principles in most of the variants of both dilemmas representing comparable value conflicts (cf. Figure 2). Analogously, the reverse effect shows up for the heterogeneous subjects (cf. Figure 3). However, despite this intrapersonal tendency towards identity or diversity respectively in choosing moral principles, the moral judgement profile ("S" or "H") on the level of the "modal stage" does not correspond exactly to the moral judgement profile ("S" or "H") on the level of "conflicting values". Some of the persons reasoning homogeneously in terms of "modal stage" differ in the moral principles they apply from one dilemma to the other according to the type of moral conflict (cf. Figure 2; proportion "S"/N 0.25 ... 0.5). Analogously, for each value conflict there is a considerable number of heterogeneously judging persons applying the same moral principle in one or more of the parallel "conflicting value"-situations within the two dilemma stories (cf. Figure 3; proportion "H"/N 0.1 ... 0.4).

These exceptions might be caused by interpersonally different ways of perceiving situational features as relevant for the choice of moral principles (Beck, 1996c, 94). While some may usually attach relevance to the type of "value conflict", others might differentiate between areas of life. This last effect could therefore be also referred to as a "story" factor (as suggested by Lind, 1993). Intrapersonally, it is also possible that an individual considers the two stories to be each of a different moral character and

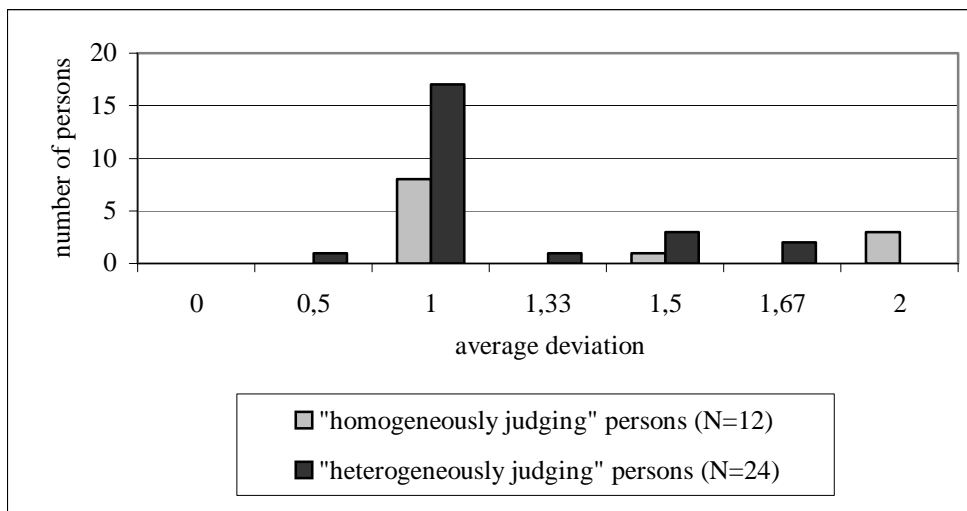
therefore is stimulated not to apply the same moral principle to both of the stories, i. e. to vary moral principles according either to the factor "value conflict" or the other contextual features ("story" factor) or even according to a combination ("interaction") of both.

On the basis of these assumptions the 16 apprentices judging homogeneously in terms of their "modal stages" (cf. Figure 2) seem to perceive the two different business-related dilemmas as of equal moral character. In order to explain this homogeneity, one could - at first glance - assume that these persons stress the relevance of the factor "story" rather than of the factor "value conflict". They are not much influenced by the factor "value conflict", because they apply the same moral stage in most of the variants of the dilemma. But nevertheless, some of these homogeneously judging testees occasionally apply different principles to the same value conflicts in both dilemmas. In these cases the particular value conflicts within the two business stories might make a morally relevant difference to them. Furthermore, it is possible that subjects arguing homogeneously in terms of "conflicting values" perceive both factors as important stimuli considering particular conflicts as well as stories as morally relevant differential simulators. By way of analogy, the data presented in Figure 3 allow the same variety of possible explanations.

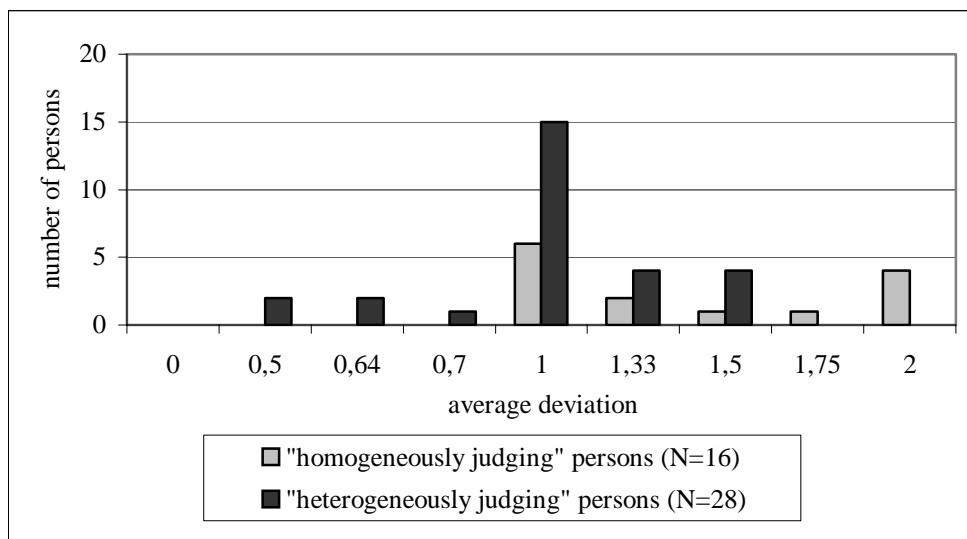
So far, the results shown in Figures 2 and 3 lead to the conclusion that it is neither the "story" factor nor the "value conflict" factor by itself which, in general, "triggers" the choice of a moral principle. Moreover, it even seems to be necessary to look out for other factors if the goal of a most complete explanation of the choice of moral principles is to be reached.

In order to obtain a somewhat clearer picture of the determinants of situation-specific moral thinking, a third step of analysis was added - divided into two sub-analyses: (i) Firstly, we followed an intraindividually oriented strategy by calculating a dilemma-specific coefficient of the intrapersonal average deviation of value-conflict-specific moral thinking (cf. Chapter 2) from the "modal stage" (cf. Figures 4, 5)<sup>8</sup>. This individual average deviation should yield a more exact measure of the 'amount' of heterogeneity than simply the number of deviations from the "modal stage" per dilemma for the two groups of homogeneous and heterogeneous judging persons as "measured" by the modal stage score (cf. Figures 1-3). (ii) Secondly, from an interindividual point of view, we calculated the interindividual dilemma-specific mean of the intraindividual average deviations (cf. Table II).

**Figure 4: Intraindividual average deviation from the "modal stage":  
"external relations"-dilemma (N=36)<sup>9</sup>**



**Figure 5: Intraindividual average deviation from the "modal stage":  
"internal relations"-dilemma (N=44)**



(i) According to the intraindividual coefficient most of our apprentices - those arguing on the same "modal stage" as well as those reasoning heterogeneously - deviate from their modal principle about one moral stage in both dilemmas. It might be argued that the persons concerned are in a phase of transition. This could theoretically be true for all apprentices, because they are exposed to new and intensive field-related influences since having started their vocational education. On the other hand, as already mentioned, we do not consider this interpretation very plausible. Individual biographies and careers (today) differ far too much to vindicate the assumption of globally parallelised socialization effects which would stand against the hypothesis of

simultaneous stage transitions across our whole sample. Interestingly enough, the maximum deviation values are not reached by those individuals diagnosed as "heterogeneous" in terms of "modal stage" but by "homogeneous" persons. We come back to this result in Section (ii). Ten out of 36 apprentices (i. e. ca. a quarter) in the "external relations"-dilemma and 16 out of 44 apprentices (i. e. nearly one-third) in the "internal relations"-dilemma deviate - in calculated values - more than one stage from their modal stage. At least in these cases the objection of transitional phases as an argument against the assumption of segmentation would not be acceptable.

**Table II: Interindividual average deviation from the "modal stage"**

<b>1</b> <b>Dilemma</b>	<b>2</b> <b>«Homogeneous Sub-sample» mean (N=16)</b>	<b>3</b> <b>«Heterogeneous Sub-sample» mean (N= 36)</b>	<b>4</b> <b>Sample mean (N=52)</b>
<b>«External Relations»</b>	1.29 (N=12)	1.11 (N=24)	1.17 (N=36)
<b>«Internal Relations»</b>	1.42 (N=14)	1.04 (N=28)	1.17 (N=46)

(ii) With respect to the group mean of the coefficient of average deviation, the data shown in Table II yield the following remarkable results: First, in both dilemmas the apprentices judging homogeneously in terms of their "modal stages" show a higher (!) interpersonal mean of average deviation than those judging heterogeneously (sub-sample "homogeneous"; see Column 2 as compared to Column 3). And that is true for both stories. For those persons whose judgements are just about in line with the Kohlberg theory (sub-sample "homogeneous", see Column 2), we have found a greater interindividual variance in the within-company dilemma (1.42) than in the one on external relations (1.29). Conversely, if only the heterogeneous cases are taken into account (sub-sample "heterogeneous", see Column 3), the inverse effect shows up (1.04 for the "internal relations"-dilemma, 1.11 for the "external relations"-dilemma). According to these results, the hypothesis of an intraindividually constant tendency towards either homogeneity or heterogeneity of moral judgement suggested above cannot be upheld. Moreover, the findings shown in Figure 2 and 3 do not tell the whole story in the light of the average deviations reported in Table II: the apprentices judging homogeneously on the level of "modal stage" vary to a larger extent in the use of moral principles applied to the two stories than the heterogeneous testees, and that in the reverse direction ( $1.42 - 1.29 = .13$  for the homogeneous sub-sample vs  $1.04 - 1.11 = -.07$  for the heterogeneous sub-sample).

Whereas Figure 2 and 3 suggest that the "homogeneous" persons' arguments are all in all far more homogeneous than those of the heterogeneous group, it now turns out that their judgements differing from the modal stage in each dilemma spread along a wider range than those of the "heterogeneous" persons ("external relations"-dilemma: 1.29 vs. 1.11; "internal relations"-dilemma: 1.42 vs. 1.04). If there were only a factor "story" at work, this result would not be plausible. We therefore suppose that there are more factors influencing the choice of a moral principle. Interestingly enough, a look at Column 4 shows that the overall means (1.17) are identical. This finding strengthens the suspicion that Kohlberg's "modal stage" measure is somewhat artificial. Its application to our data leads to results which are in no respect plausible if they are interpreted in the light of Kohlberg's theory. Rather, the results confirm the vagueness of the "modal stage" measure as a criterion for examining the stability of the presumed structured wholeness of moral thinking. The very concept of the "modal stage" seems to conceal information about theoretically interesting variations in moral judgement depending on the factors "story" or "value conflict" or even others.

#### **4 Conclusion**

As a conclusion, the results of our findings do not deliver a satisfactory explanation for inconsistent moral judgements in general. Nevertheless, they firmly indicate - contrary to Kohlberg - that individual patterns of moral judgement are in fact context-sensitive to a large extent. This seems to be highly probable for the variance produced by the factor "story" as well as for the influence of the perceived "value conflicts" within the respective dilemmas. In our view, a better theoretical framework regarding the individual reconstruction of morally relevant situations is needed to allow for the identification of - perhaps individually specific - core criteria for moral segmentation.

A further major task would be to remodel the interaction of these factors in the process of moral judgement. We find our assumptions confirmed in some other material of our study, for example in the moral judgements of the same apprentices according to the two other dilemma stories we presented to them (Kohlberg's "Heinz"-dilemma and a story on friendship relations). It is tempting to speculate whether these results could be replicated with Kohlberg's own data. Our experience in conducting moral judgement interviews gives us reason to suppose that it is a broader set of differentiated factors which influences the process of moral judgement generation (e. g. the person's own account of possible consequences of action, the individual's estimation of the probability of success in conflict solution, the grade of personally attributed guilt and shame or the extent of the subject's emotional involvement).

A study by Brugman (1996, pp. 6-8) about chartered accountants' moral judgements according to dilemmas situated in their professional field of business has revealed that moral responsibility is correlated to at least two determinants: the size of the company and some regional differences, which both influence the cultural climate within the company.<sup>10</sup> If findings like these could be confirmed and differentiated by gathering and exploring further data, this could stimulate a better understanding of moral reasoning in its relations to the characteristics of situations.



## NOTES

- [1] The apprentices spend 1 ½ days per week at their vocational school, the „Berufsbildende Schule III“ in Mainz. They completed the questionnaires in two sessions on two different days. The dilemmas were scored independently by two members of staff of the research project, who later compared their scores and discussed them when they were at odds in order to determine *one* final score for each moral issue. The interviews were carried out later at the University to gain extra and more detailed information on the subjects' reasoning and the situational background as the see it. Where this information led to a different picture of the subjects' moral reasoning, the original – questionnaire based – scores have been revised.
- [2] We took the description of moral justice operations (cf. Colby/Kohlberg, 1987, Vol. I, pp. 25-35) as the main starting point for our German manual and elaborated different types of perspectives and content elements within the six stages, using also Colby/ Kohlberg's further elaborations as well as the criterion judgements in the Scoring manual (Vol. II). However, we only specified general scoring guidelines, but no criterion judgements, because we think that moral arguments have to be seen in their context, and the use of criterion judgments does not account for this.
- [3] The database for this has been gained by using interview scores where available and scores from the questionnaires in the other cases.
- [4] In our study we assign a stage to every value conflict issue, so that the number of issue scores per dilemma is always the same (provided that here are no missing data).
- [5] The different sizes of the sub-samples on the level of the modal stage and on several value conflicts are due to different amounts of missing data.
- [6] See footnote 5
- [7] See footnote 5.
- [8] Of course, in terms of the relation between the empirical and the numerical relative it is not allowed to carry out calculations like this. Therefore, we interpret the numerical results very carefully in looking at them only as indicators for empirical facts.
- [9] An average deviation lower than one may result when the modal stage had to be fixed between two stages (e. g. "2.5" if a testee uses arguments on Stage 2 just as often as arguments on Stage 3).
- [10] In Brugman's study, the situational features are described as "objective" structural attributes. In our opinion it is only the subjective "perception" of the situation that is relevant for moral judgement (although it may well be that structural features are observed in a similar way by the majority of subjects). In this view the "objective" described features may strengthen the subject's moral responsibility as shown by Brugman.

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