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31

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**Autonomy in Heterogeneity?
Development of Moral Judgement
Behaviour During Business Education**

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Judgement Behaviour During Business Education**

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1. Introduction

Thanks to LAWRENCE KOHLBERG, morals in many European countries have become an acceptable topic in educational research and practice again. After a long period dominated by a behavioristic point of view followed by cognitivist approaches, a revival of the topic of value education can be observed since the middle 80ies. This is not only true for scientific journals but more and more for public opinion, as well. Of course, there are current pragmatic reasons for the renewed interest in that issue like growing violence in schools among students (including the still hidden problem of resort to force by teachers against students; KRUMM 2000). But the real reasons for the former moral “abstinence” immanent to educational research esp. in the German and Roman speaking countries have to be sought elsewhere, i.e. in a growing distrust against the “high-flown” objectives, “soft as wax”, which go back to a strong and long tradition of liberal arts and humanities. Moreover, during the era of student revolution, dealing with value education has been highly inopportune despite enthusiasm for high values. Paradoxically enough, the program of anti-authoritarian education founded in values like freedom, justice and equality, which is in itself highly normative, demanded to refrain from any value education whatsoever.

One of the great merits of KOHLBERG has been to merge cognitive psychological methodology and traditional contents of value education into an educational and a research approach which could be handled and discussed on the basis of a modern understanding of enlightened science. The lively response the stage theory of moral development has received and continues to receive shows that there has been a growing demand for adequate measures and instruments to cope with the actual problem situation. The upcoming Communitarianism (e.g. WALZER 1983) has been a further reason to foster the dissemination of the new moral psychology.

Now, after a period of consolidation of KOHLBERG’S theory – as an amazing analogy to the stage consolidation and stage questioning process – empirical problems have got into the centre of interest which are not solvable by the approach as it currently stands. At first glance, these problems arise from the measurement procedure, the Moral Judgement Interview (MJI),

developed and improved step by step by KOHLBERG and his co-workers (GARZ 1996) and published in a last version in 1987 by COLBY and KOHLBERG. In short, there are four main points of criticism:

- (i) The reasons for computing a modal stage as a “true” diagnostic value are not convincing. Persons who produce judgements of different stage levels within an interview on a moral dilemma react on variations of the context induced by the interviewer. Consequently, the different judgements usually to be found in an interview are not the result of measurement errors but of varying stimulus contents.
- (ii) The question of how often an interviewee is provoked to utter a judgement on a certain constellation of values is a matter of how an interviewer carries on the MJI. But the number of (scorable) judgements is of direct influence on the resulting mode.
- (iii) If the MJI stimulates the *highest* level of moral thinking (i.e. “moral competence”) which an interviewee is capable of, it is hard to see why the *modal* stage should be an adequate model. Rather, the highest stage score within an interview should be taken as a representation of the interviewee’s moral competence.
- (iv) To discriminate between moral competence and moral performance presupposes that there is an empirical criterion to make that decision. The KOHLBERG group interprets moral judgements beyond the modal stage of a person as a result of not exhausting his or her moral competence, i.e. moral performance. But how can we know that a person’s modal (or “highest”) judgement uttered during an interview (if it is lower than stage 6) is, at the same time, his or her “best” moral judgement to be produced at all, i.e. his or her moral competence? Would it not be possible that the interview has not succeeded in offering a situation which is apt to stimulate a judgement still higher than that uttered previously, i.e. on the interviewee’s so-called “true” level of competence?

Considering these problems, the procedure of computing a modal stage across three different dilemmas (each of them varying in content by up to seven modifications) masks variations of judgements in interpreting them as error of measurement. And, what’s more, it immunises the theory of moral development which claims that moral judgements are produced by a structured wholeness. Our study sets in at that point. It takes up the criticisms expressed by differ-

ent authors from different perspectives (see Chap. 2 below). They all question one core issue of Kohlberg's theory, namely the hypothesis of the structural wholeness of moral judgement competence. If it is true that during the MJI one and the same person at one and the same time feels moved to produce moral judgements at several (even three or four) stages with respect to different hypothetical situations, it can be suspected that the assumption of structural wholeness may not be upheld. It has to be admitted that judgements on different stages above might be due to the fact that the person concerned is in a phase of transition. In that case judgements at two neighbouring stages might be expected. Therefore, we carried out a longitudinal study (lasting up to six years) with different cohorts of apprentices in order to check whether the heterogeneity of their judgements (if so) is stable or not (see Chap. 4.1.).

As KOHLBERG'S theory remains to be a theory of interaction – with or without the hypothesis of a structural wholeness – it is of interest to find out the social conditions which stimulate (or hinder or even pull down) moral development. LEMPert (1993) has suggested a set of hypotheses on the impact of social experiences and their impact on moral development (see Chap. 3 below) which allow for a rather sophisticated examination of that issue. Following the longitudinal design, we therefore also studied the social environment the young people have been living in, mainly the family background, the peer groups, the vocational school, and the company where they passed their apprenticeship.

After having outlined the theoretical foundation of our study (Chap. 2. & 3.) we report on its design, our hypotheses, the instruments of measurement, and the methods we used (Chap. 4). Then we present an overview of the results (Chap. 5) followed by a discussion of theoretical and methodological consequences to be drawn from our point of view (Chap. 6).

2. Structural Wholeness or Situated Cognition?

Situated learning is considered as irrelevant by KOHLBERG'S structural genetic approach of moral development. According to his notion of moral judgement competence as a "structural wholeness" (COLBY/KOHLBERG 1987, 7) people use the same moral principle to prove the legitimacy of an action regardless of the context or setting in which this action will take place. However, there seems to be some evidence that cognitive structures are established in, by, and for specific situations and that transfer does not easily occur (e.g. RESNICK 1987; critical hereto ANDERSON/REDER/SIMON 1996; for moral concepts cf. BURTON 1984).

The discussion has lasted quite a few years and there are renowned researchers on both sides. Whereas e.g. FLAVELL et al. (1968) - in the tradition of SPEARMAN and THORNDIKE - postulated generalised cognitive structures which are used in all content domains of thinking, SEILER (1973) suggested a restricted generality of cognitive structures, a concept which has some affinity to models of intelligence like the “Guilford cube”. He assumes that formal thinking is developed in restricted domains which are determined by the individual’s learning history and the specific influences of his social environment. According to him, the established formal reasoning systems do *not automatically* generalize beyond these domains (SEILER 1973, 264; for the notion of domain specificity cf. HIRSCHFELD/GELMAN 1994). SEILER argues, that even within a particular domain there is not only one formal reasoning system. There are as many as there are individuals and different possibilities to combine concepts (SEILER 1973, 268). Thus, an individual could acquire several reasoning patterns even for one and the same domain, maybe partly overlapping, which will be activated by different stimulus configurations.

BROWN, COLLINS & DUGUID suggest to consider conceptual knowledge as a set of tools (1989, 33). ”Learning how to use a tool involves far more than can be accounted for in any set of explicit rules. The occasions and conditions for use arise directly out of the context of activities of each community that uses the tool, framed by the way members of that community see the world. [...] Because tools and the way they are used reflect the particular accumulated insights of communities, it is not possible to use a tool appropriately without understanding the community or culture in which it is used” (ibid.). That is why LAVE & WENGER (1991) argue for learning as a situated activity in “communities of practice”. “The contemporary view tends to be that cognition is *typically* situated in a social and physical context and is rarely, if ever, decontextualized” (BUTTERWORTH 1992, 1).

What if we assumed that there were no “structural wholeness” in moral reasoning? Could situated cognition be an adequate approach for modelling moral development?

PIAGET’s theory of child development which forms the basis of KOHLBERG’s moral development model does not abstain from content specificity. E.g. PIAGET (1941) distinguishes cognitive domains according to the prevalent cognitive operations (e.g. the mathematical-physical domain and the social domain¹; cit. in ECKENSBERGER/SILBEREISEN 1980, 28). Moreover, he admits that reasoning in a formal way sometimes depends on particular domain-specific

¹ PIAGET himself experimented solely with problem-solving tasks in the natural sciences (cf. SEILER 1973, 262).

knowledge (PIAGET 1972, 10). The hypothesis goes “that all normal subjects attain the stage of formal operations or structuring if not between 11-12 to 14-15 years, in any case between 15 and 20 years. However, they reach this stage in different areas according to their aptitudes and their professional specializations” (PIAGET 1972, 9-10). Although one essential characteristic of formal thought is its independence from content. There is a decisive difference between generalising from one content to a different but comparable content and generalising from a subject’s field of vital activities to a “totally new field, entirely away from his or her interests and projects. Briefly, we can retain the idea that formal operations are free from their concrete content, but we must add that this is true only on the condition that for the subjects the situations involve equal aptitudes or comparable vital interests” (PIAGET 1972, 10-11). Especially at the end of adolescence when people start their highly specialised professional lives we have to analyse “whether the same structures are sufficient for the organisation of many varying fields of activity [...] or whether there will appear new and special structures that still remain to be discovered” (PIAGET 1972, 11).

With regard to role taking which implies a cognitive structure that is essential for moral reasoning, SELMAN & JACQUETTE (1977), too, distinguish content domains consisting of concepts and types of interpersonal relationships (concepts of single persons, dyadic relations, peer group relations). It is pointed out, that the socio-cognitive development in these domains does not have to be parallel although the reasons for developmental shifts are unclear (KELLER 1980, 167).

Thus, one might argue that there is enough evidence in the theoretical basis to review KOHLBERG’s thesis of a structural wholeness. REST (1979; REST et al. 1999) proposes to conceptualise moral principles not as stages like KOHLBERG did but as schemas. Following his “neo-KOHLBERGian” approach, (vertical) moral development does not mean to displace a “lower” moral structure by a “higher” one but to establish a new, additional reasoning schema of how to co-operate with one’s fellow-men. The hierarchical sequence proposed by KOHLBERG is still preserved in the schema concept. According to Rest, the moral judgement competence of a person consists of the set of subsequent co-operation schemas acquired so far. Horizontally, moral development takes place when “higher” schemas are applied in ever more and more contexts.

The research results of KREBS et al. concerning real-life moral dilemmas support this view. “We have found that virtually all adults invoke Stage 2, Stage 3, and Stage 4 forms of moral judgement in their everyday lives; that moral judgement is not organised in structures of the whole; and that new structures do not transform and displace old structures [...]. Our findings suggest that structures of moral judgement are domain-specific and that they develop in an additive-inclusive manner” (KREBS/DENTON/WARK 1997, 132).

The “neo-KOHLBERGian” approach, however, systematically has to address to the question why people do not always use their “highest” moral principle, a phenomenon which has widely been observed by moral researchers (s. REST 1979; BERTRAM 1983; HEGNER/LIPPERT/WAKENHUT 1983; SENGER 1985; MONTADA 1987; KELLER 1990; 1996, 153; HOFF/LEMPERT/LAPPE 1991; LIND 1993; BREDEMEIER/SHIELDS 1994, 176-177), not least by KOHLBERG himself (e.g. 1969, 386-387; COLBY/KOHLBERG 1987, 83-90; see also below). KOHLBERG accounted for this empirical finding by theoretical deliberations on the one hand and by counterbalancing the different dilemma-forms on the other. As to the first point, he assumed that in transitional or stabilising phases (“décalages”) two adjacent stages may be used (COLBY/KOHLBERG 1987, 8, 90). Moreover, differing moral judgments of more than two stages were put down to measurement errors (Chap. 1, no. i). Consequently, KOHLBERG applied particular calculating procedures to get to a “modal stage” of moral reasoning (cp. COLBY/KOHLBERG 1987). As to the different forms of the MJI, he introduced a conversion formula to parallel the three forms when he noticed that “each form gives slightly different pulls for certain stages, for example, for stage 1 and for stage 5” (COLBY et al. 1983, 23, cit. in REUSS/BECKER 1996, 76). However, he did not try to find out in detail which issue or dilemma characteristics were responsible for these “pulls”. In the end, the scoring routines have hindered a review of the theory. DAMON criticises KOHLBERG for not adequately demonstrating the uniformity of his moral issues. “My own view is that all of KOHLBERG’s moral issues are potentially distinct. I see no reason to assume a priori that these separate concerns are subparts of a coherent unified ‘moral’ system” (1977, 52, cit. in KELLER 1996, 91).

DAMON’s view is supported by further hints to the “context-sensitivity” of moral judgement. In a longitudinal study on moral development with Turkish adolescents and adults aged 10 to 28, NISAN and KOHLBERG (1982) postulated that the issues *law* and *punishment* would trigger arguments of lower stages of moral judgement referring to “findings suggesting that the level of cognitive functioning in a certain domain (with regard to a certain content) may be affected

by the individuals' familiarity with and experience in this domain [...]. This leads to the hypotheses that when dealing with issues which are closer to their everyday experience, subjects might argue on a higher level than when reasoning about dilemmas which are far from their experience" (NISAN/KOHLBERG 1982, 867, cit. in REUSS/BECKER 1986, 77). Due to differences in life conditions there may be cultural variance in the level of moral judgement across different issues (ibid.). Indeed, NISAN and KOHLBERG found significant issue-related differences in moral judgement, but only in the age group 10 to 15 (cp. REUSS/BECKER 1986, 77). SARASWATHI et al. (1977) also report higher stage scores with familiar issues (*father-son-relationship*) than with unfamiliar settings (e.g. *contract*) (cit. in ECKENSBERGER/REINSHAGEN 1980, 99).

If we assume that "concrete" dilemmas are more familiar than "hypothetical" ones, the findings quoted above are yet contradicted by another KOHLBERG study. Whereas nurses reached higher scores in dilemmas placed in a hospital setting, i.e. in their own professional context, than in so-called hypothetical dilemmas, delinquents scored the other way round. They were lower in the so-called concrete dilemmas dealing with a prisoner's situation (cit. in ECKENSBERGER/REINSHAGEN 1980, 99).

Several other findings point at judgement differences due to moral issues or contexts. DE VRIES and WALKER e.g. report on a study with adult subjects (17 to 35 years old) arguing for and against the death penalty. Supporters and opponents of the death penalty alike used higher stage reasoning on the issue *conscience* and lower stage reasoning on the issue *punishment* (cf. REUSS/BECKER 1986, 77). However, these differences in moral judgement might not be only issue-related. As SARASWATHI et al. (1977) found in their sample, the issue *punishment* in the Heinz-dilemma got lower scores than in the other two dilemmas of KOHLBERG's standard form A and GASH (1976) showed that the moral judgement level varied with the personal relationship between the dilemma protagonists (cit. in ECKENSBERGER/REINSHAGEN 1980, 99).

REUSS and BECKER consider the type of the trigger question (concept-oriented vs. situation-specific) as another potential factor for varying moral judgements (cf. 1986, 76). Moreover, they have categorised the classical KOHLBERG issues in heteronomous (*law, punishment, authority*) and autonomous issues (*life, conscience, contract*) (1986, 79). They hypothesise that depending on the level of moral reasoning (preconventional, conventional, postconventional)

heteronomous issues trigger a different stage than autonomous issues and that this effect has nothing to do with the individual's familiarity with the dilemma (REUSS/BECKER 1986, 79). However, the empirical findings of REUSS and BECKER do not support their hypothesis (cf. 1986, 81).

Last but not least, ECKENSBERGER has suggested another classification. "Some dilemmas (personal dilemmas) deal with conflicts that exist primarily between acting subjects in terms of persons, others (transpersonal dilemmas) primarily deal with functions, roles or general principles, and still others are more or less indifferent with reference to these social spaces (equivocal dilemmas)" (ECKENSBERGER 1988, 2, cit. in REUSS/BECKER 1986, 78). According to ECKENSBERGER, transpersonal dilemmas should trigger higher stages than personal dilemmas (cf. REUSS/BECKER 1986, 78).

LIND (1983) gives a sort of meta-explanation for the heterogeneity of moral judgement stating that the "highest" moral principle does not have to be appropriate to solve a specific conflict. Thus, people differ in their moral judgement because they always choose the principle which is most adequate to the actual characteristics of the moral problem. Or as BUTTERWORTH referring to Cole & Cole puts it: "The appropriate context may call up the appropriate strategy" (1992, 7). For such a correspondence the individual's interpreting of the situation seems to be crucial (cf. e.g. BREDEMEIER/SHIELDS 1994, 179).

To end up our literature review, we would finally like to challenge another argument mentioned at the beginning (Chap. 1, (iv)) apt to immunise KOHLBERG's theory of moral judgement competence by regarding heterogeneity in moral judgement simply as a matter of performance. "[P]eople may not perform at their level of competence in all contexts" (KREBS/DENTON/WARK 1997, 135; cf. COLBY/KOHLBERG 1987, 5, 8). If so, how could we ever be sure to measure moral competence at all? If not the stories and the trigger questions in the MJI (or SRM; cf. Chap. 4.1.) what stimuli would we have to provide by our instruments in order to identify the *true* level, i.e. the level of competence? Instead, our own notion of moral competence and development allows a "segmented", domain-specific cognitive structure of moral reasoning beyond mere differences between a "competence" and a "performance" level (see Chap. 6).

Summing up, the explanations for “moral segmentation” - i.e. a (systematically) heterogeneous, context-sensitive competence of moral judgement - are not unanimous and in some cases more, in others less elaborated. Different reasons for this phenomenon are given:

- (1) transition phases or effects of “*décalage*”
- (2) dilemma/ story characteristics (issues and situational stimuli)
- (3) domain-specific moral structures
- (4) differences between moral judgement competence and performance
- (5) measurement errors.

One last aspect should be mentioned before suspending (4) and (5) and testing (1) to (3) against our data. Apart from “segmentation” there is another empirical finding which is not in line with KOHLBERG’s theory and which we also focused in our study, namely *regression* in moral “development”. LIEBERT cites a follow-up study by KOHLBERG (KOHLBERG/KRAMER 1969) in which “a number of the subjects” showed a lower level of moral reasoning compared to their time at high school (1984, 181). HOLSTEIN (1976), too, found that among her subjects (53 families) large percentages regressed across a three-year period, in fact parents and adolescents alike (LIEBERT 1984, 182), whereas LIND (1993) reports of regressions among his subjects especially after having left the formal education system. Results from earlier empirical studies indicating the possibility of regression were discussed already during the 70ies by KOHLBERG (cf. COLBY/KOHLBERG 1987, 72-75). His decision to establish stage 4/5 partly goes back to that findings. Up to now there is no theoretical solution to the problem of regression to be seen offered by the KOHLBERG-group.

3. Conditions of Moral Development

Starting from the working hypothesis that people acquire different, whilst relatively stable stage concepts with respect to different domains of life, the question is how those domains are constituted and how development takes place within and/or across them. It is not yet clear, what “domains” really are and how they are formed in the first place (cf. BECK 1996), but it is our conviction, that they depend on individual perspectives and are therefore to be reconstructed from the “eye of the beholder”. In this light the individual notion of domain might draw to “central conceptual structures” (CASE 1992a, b), which are themselves highly integrated, but more or less sparsely interrelated. As we, in general, tend to differentiate strongly

between our professional and our private lives, these areas are “first class candidates” for domain-specific segmentation, but there are other – or rather further – possibilities as well (see Chap. 2).

The basic idea of domain-specific development is that in each field of action different types of problems arise which demand (stage-)specific solutions and perhaps a particular moral expertise. Whereas in low-profile vocational occupations one simply has to follow fixed rules, (stages 1 or 2) managerial tasks demand social responsibility in setting such rules (stage 5). Stage 3 moral reasoning may be appropriate in a family or group-related context, but an overall societal perspective (stage 4) seems to be a prerequisite for responsible political life in a “functioning” democracy. Domain-specific development might thus follow the stimuli provided by the individual’s social environments in the various fields.

What kinds of stimuli might there be? In the KOHLBERG-tradition two ways of direct cognitive stimulation have been proposed. On top of these, WOLFGANG LEMPert has in recent years suggested a fairly comprehensive set of developmental conditions, including emotional stimuli as well (cf. 1993). These three approaches are outlined in the following passages.

1. The first is the so-called “+1”-hypothesis, which is built on the assumption that an individual can always understand the arguments of the next stage up the hierarchy, but not higher ones (cf. BLATT/KOHLBERG 1975). If this is the case, the individual could simply take over the modelled type of reasoning once he or she has experienced the deficiencies of the current stage. This approach, however, remains mute as to how the individual comes to experience a cognitive conflict on his or her current stage, which would then merely trigger the eventual transition towards the pre-modelled higher-stage solution.
2. This is exactly the focal point of the second approach, which has been worked out by LAWRENCE WALKER (1986). He thinks it crucial, that the individual is confronted with counter-arguments on the same stage as the person’s reasoning. This pro/contra-strategy is thought to cause a cognitive conflict on the current stage so as to entail a process of re-equilibration onto the next stage.

These two approaches suggest stimuli at different stages, but nevertheless they are not really opposed to each other, because they relate to different aspects of the transitional process.

They might indeed be complementary in that the pro/contra-strategy produces the problem which the +1-strategy helps to solve. Thus, WALKER's ideas seem to draw to the necessary condition of conceptual change, whereas the +1-strategy would rather accelerate an already initiated developmental process (for a more detailed account of how transitions seem to occur cf. MINNAMEIER (2000)).

If there is a lesson to learn from constructivism, then this is the insight that not everything that is present – from an observer's point of view – in a given situation is also perceived as such by an observed individual, who is acting in that situation². Put in context this means that appropriate arguments or conflicts might not function as stimuli, because the person exposed to those stimuli fails to realise them altogether or does not take them seriously. This could be due, for instance, to a more or less restrictive corporate culture in a company which were not suited to bring about a feeling of commitment and responsibility or a sense of belonging. As a result this might entail a reduced sensitivity for conflicts or create even some sort of “none of my business”-attitude with respect to corporate matters.

3. LEMPERT (1993) has tried to account for this broader field of influences in differentiating what he calls socio-biographic conditions of moral development (cf. Tab. 1):

Tab. 1: Socio-biographic conditions of moral development

Socio-biographic conditions	Influence on moral development	
	positive	negative
regard	high	low
conflicts	open	hidden
communication	free	restricted
co-operation	participatory	directorial
responsibility	adequate	inadequate
scope of action	adequate	inadequate

As moral development according to KOHLBERG relies heavily on operations of prescriptive role-taking (cf. e. g. COLBY/KOHLBERG 1987, 24), *regard* from significant others seems to be a ma-

² Even the very idea of a specific „situation“ should perhaps not be (mis-)taken as some pre-established piece of the objective reality, as it were, rather should it be understood as a result of the constructive conceptualisation by the individual (cf. BECK 1996)

major precondition for taking other people's perspective in the first place. Lempert distinguishes regard as a good role occupant (which should stimulate especially the transition from pre-conventional to conventional morality) from regard as a unique personality (as a condition for the transition from conventional to post-conventional thinking).

Conflicts are thought to stimulate development in that they provide the material for reflection – but only if they are discussed in an open manner, so that the divergent views are laid out for consideration. If they are only hidden, this could lead to evading or downplaying conflicts altogether and thus produce just the opposite effect.

Communication is thought to be important, because different views of matters can be exchanged if those relations are not restricted. Free communication helps putting forward one's own opinions and having them discussed.

Co-operation brings about a need for co-ordination and self-organisation of teams which on the one hand implies social norms to be set and followed and on the other produces issues for individual moral reflection.

The chance to bear *responsibility* makes moral reflection in the domain more serious and could make plain possible consequences. This would again stimulate interactive sequences of reflection and action, where then the last condition comes in. Responsibility is thought not to be enough, but has, according to Lempert, to be matched with an adequate *scope of action* to be in fact accountable for what one is formally responsible. Both these last two conditions can be inadequate in that they are either overcharging (where things cannot be managed by the individual) or undercharging (where there are too many restrictions) and thus hinder moral development.

So far the KOHLBERG-theory only allows for developmental changes towards higher stages, whereas regressions are said to be impossible (see Chap. 2). But if socio-biographic or cultural factors have a bearing on the individual's moral orientation, regression should not be excluded per se. It rather stands to reason, that if conceptual frameworks are domain-specific and perhaps set up afresh in each field a person conceives of as "new", he or she might adapt to the culture and customs they encounter including common regulative moral principles. Probably there will always be some balance between transfer on the one hand and starting from scratch on the other, because the former translates into an initial competence whereas the latter stands for openness and flexibility – and both adaptive attitudes are important. In this respect, moral regression seems indeed possible and therefore the directions of influence in the above table should perhaps be denoted as "upward" and "downward" instead of "positive"

and “negative”, because conditions may not only obstruct progressive development, but may as well be dragging down.³

Apart from the overall effects, LEMPert has also specified sets of conditions which foster or hinder the particular transitions from pre-conventional to conventional thinking and from there to post-conventional reflections. In this article, however, we only consider the overall assumptions because our analyses dealing with the development conditions are still at the starting point. Nevertheless, we have included LEMPert’s further differentiation between esteem as a (good) role occupant on the one hand and as an individual personality on the other as well as between several types of conflicts.

As already mentioned above, different conditions in different domains of life may cause domain-specific paths of moral development. And as these conditions have to be measured as *individually perceived* qualities of social environments they may also depend on the stage-specific moral perspective from which one looks at the different fields of action. Such “recursive feed-back loops” (cf. BECK 2000, 357) might stabilise moral segmentations once they are established, if they are not even partly responsible for the very differentiation of domains in the first place, i. e. the perceived differences of moral involvement or responsibility may in turn be constitutive for the individual’s concept of domains.

4. Method

4.1. Design Overview and Procedure

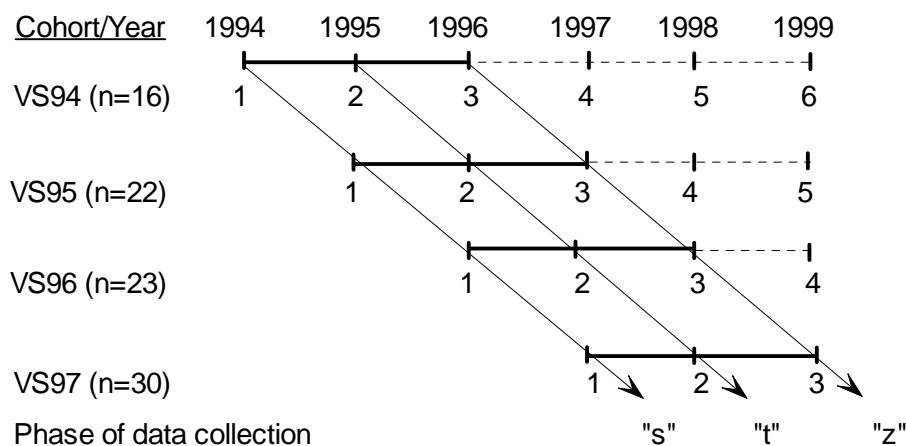
The focus of our study was on two main goals:

- Analysis of KOHLBERG’s hypothesis of a structural wholeness of moral reasoning. We assume that moral judgement varies with the presented dilemma (two dilemmas in business context, Heinz dilemma, dilemma in the peer-group).
- Empirical analysis of the relevance of socio-biographic conditions of moral development in different areas of life (business, vocational school, family and peer-group) for moral judgement as measured by the four dilemmas.

³ Here, „positive“ and „negative“ are not used in an evaluative sense. They should only indicate the direction of development, not appreciate or depreciate it in any way.

As was already mentioned in Chap. 1, to analyse the 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 that a person is in a state of transition.

Fig. 1: Design overview



In 1994 we started our six-year longitudinal study with apprentices in insurance companies. They usually spend 1 ½ days per week at a vocational school. The rest of the week they are trained (and work) in the company. The apprenticeship lasts between two and three years, depending on the level of previous education. Altogether, there are 91 apprentices included in our study, 43 of them females. In this article we report on a sample of apprentices who started their vocational education between 1994 and 1997 (cf. Fig. 1). They were between 17 and 24 years of age. The study began in 1994, with new classes (cohorts) being included each year (from 1995 through 1997).

To diagnose moral judgement competence the sample was assessed with four dilemma questionnaires situated in the contexts “within-business-context”, “company/client relation”, “family” and “peer-group” (see below, Chap. 4.2.). Answers are open analogous to the Sociomoral Reflection Measure (SRM) developed by GIBBS and WIDAMAN (1982) the written form of the MJI. The participants completed the questionnaire in two sessions with approximately one week between the sessions. The questionnaires have since been re-presented to all apprentices in yearly intervals.

Additionally, sub-samples of each cohort (generally 6 participants) were assessed with the MJI (Moral Judgement Interview; COLBY/ KOHLBERG 1987). Those participants who showed a rather clear tendency towards segmentation in the questionnaires and those whose moral judgement seemed to be clearly homogenous across the different questionnaires were selected for these sub-samples. The interviews were carried out some weeks later at our department to gain extra and more detailed information on the subjects reasoning and their socio-biographic background. They were conducted individually, audio-taped and transcribed for scoring. Our findings are based on both sources of information, questionnaires and interviews (see also below, Chap. 4.2.).

4.2. Instruments

The interviews as well as questionnaires consist of four stories situated in the four areas of life mentioned above. In all four of them, participants were questioned what to do and how to justify their decisions. Circumstances of action were varied in order to contrast different values/issues (see below) as is done in the Heinz dilemma by COLBY/ KOHLBERG (1987).

The first of the business related dilemmas concentrates on a within-company social conflict implying internal social relations between superior and subordinate:

Mr Holm, an employee, of an insurance company is asked by his superior, Mr Olten, 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 (*affiliation vs. law/ property*).

Variants on this case (*resp. variants of value conflict situations, i.e. "issues"*):

(a) Does it make a difference if Mr Olten is a fair and co-operative or a ruthless, authoritarian and self-ish person (*positive/ negative affiliation vs. law/ property*)? (b) It is not the superior, but a subordinate, Mr Zinn, who asks the employee to forge the sales report (*affiliation vs. law/ property*)? (c) Olten asks Holm to conceal an extra pay for the insurance agents and to let him have the money (*affiliation vs. law/ property*). (d) Should the employee immediately demand repayment of a larger amount of money that he has lent to an acquaintance for three years to let Mr Olten have the money (*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 Holm's dismissal after finding out the fraud (that he had committed in the knowledge of his superior being in mortal danger) (*justice vs. law*)?

The second business related dilemma concerns an external conflict between company and client.

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

Variants on this case (*resp. variants of value conflict situations, i.e. "issues"*):

(a) The charming widow lives in poor conditions (*positive affiliation vs. law/property*). (b) Mrs Danz 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) Mrs Danz 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, Mrs Danz 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*)?

As an anchor dilemma we used KOHLBERG's Heinz-story which we classify as 'family context':

The wife of Heinz is close to death from a special kind of cancer. A newly developed drug might save her life. The drug is very expensive to make, but the druggist who developed it, charges 10 times what the drug cost him to make. Heinz went to everyone he knew to borrow the money and tried every legal means, but he could not get the necessary amount of money. Heinz gets desperate and considers breaking into the store to steal the drug for his wife. Should Heinz steal the drug (*life vs. law/property*)?

Variants on this case (*resp. variants of value conflict situations, i.e. "issues"*):

(a) Does it make a difference whether or not Heinz loves his wife (*private/negative affiliation vs. law/property*)? (b) What if the person dying is not his wife but a friend or even a stranger (*affiliation vs. law/property*)? (c) What should Heinz do if the druggist offers to sell the drug for production costs but Heinz knows that he can't even raise this amount of money (*affiliation vs. property*)? (d) How important is it generally to obey the law (*law vs. own interests*)? (e) What should Heinz do if the druggist offers payment by instalments, but Heinz is aware, that he won't even be able to pay the rates (*affiliation vs. contract*)? (f) Heinz did break into the store and steal the drug. Should he be punished (*justice vs. law*)? (g) Does it make a difference if his wife doesn't have cancer and just needs the drug to get well sooner?

The second dilemma for the non-vocational field focuses on a conflict among peers.

A 17 year old orphan boy (Florian) living in residential care asks his friend to help him steal the cash box of the administrative staff. He is a talented artist and wants to escape the harshness of rules in the orphanage and try his luck living as an artist. The money is necessary to help him start his new life and career. Should his room-mate help him (*affiliation vs. law/property*)?

Variants on this case (*resp. variants of value conflict situations, i.e. "issues"*):

(a) Does it make a difference if the two boys are very close friends or if Florian is unfriendly (*positive/negative affiliation vs. law/property*)? (b) What if the cash box does not belong to the administrative staff but to other boys living in the orphanage (*affiliation vs. property*)? (c) This cash box is well hidden. All boys have sworn to keep the secret (*affiliation vs. contract*). (d) Florian is deeply depressed and threatens to commit suicide (*life vs. law/property*). (e) What should a representative of the youth welfare office do if he finds out about the theft (*justice vs. law*)?

Afterwards the answers to these dilemma questions were scored independently by two members of the research group who then compared their scores. When different scores were reached, one final score for each moral issue (i.e. conflicting pair of values) was agreed upon as a result of discussion. If the information acquired in the interview led to a different picture of the subject's moral reasoning the original – questionnaire-based – scores were revised.

For scoring we used the description of moral justice operations (COLBY/ KOHLBERG, 1987; SPIELTHENNER 1996) as basis for our German manual⁴ 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. However, we specified general scoring guidelines, but no criterion judgements, because we believe that moral arguments have to be seen in their context. Criterion judgements do not account for this. Finally, we computed the modal stage value following the rules given in COLBY/KOHLBERG (1987).

To analyse the socio-biographic conditions of moral development all participants received questionnaires about these conditions according to LEMPERT (1993; for a description see Chap. 3.). If socio-biographic conditions are stimulating, they are supposed to foster moral development, if they are less stimulating a stabilisation or even a regression of moral development can be expected. According to these assumptions we computed individual scores for each condition ranging from -1.0 ("dragging down") through 0.0 ("neutral/stabilising") to +1.0 ("stimulating").

The same participants who were interviewed with the Moral Judgement Interview were also interviewed about their conditions of moral development in the four areas of life. The interviews provide detailed information and allow a documentation of probably changing conditions over a period of time. Furthermore, with these data it should be possible to analyse the relevance of socio-biographic conditions as stimulators of moral judgement.

As control measures we collected data concerning

- the participants' intelligence (*chemical bodies*, INHELDER/ PIAGET 1958 and a psychometric measure, the sub-test "Analogien" of the "Intelligenz-Struktur-Test" I-S-T 70, AMTHAUER 1970);
- biographic and demographic information;
- conditions of vocational education from the perspective of the instructors in the companies (interviews);
- conditions of learning at the vocational school (videos of instruction in classes and teacher interviews).

These data are not included in our report here but will be used in further analyses still to be done.

⁴ Basically, answers were scored according to KOHLBERG's own rationale as we have intended to get authentic data comparable with the original KOHLBERG studies. His scoring manual was quite helpful in reconstructing the arguments from the exemplary answers listed there and in developing a deeper understanding of the different levels of moral judgement. Nevertheless its expressiveness seems to be rather limited when applied to colloquial German (see also Chap. 6). Therefore a special framework – based on the English original – had to be developed. This was a procedure which caused from time to time the necessity to rescore the data.

5. Results

5.1. Homogeneity versus Heterogeneity of Moral Judgement Competence

In order to challenge KOHLBERG's homogeneity postulate, we measured the modal stage of moral reasoning separately for each of the four dilemmas used in our study (see Chap. 4.2.). At all three times of measurement reported here several "patterns" of moral judgement were found which are not conforming to KOHLBERG's theory (see Tab. 2a). At the first time of measurement, right at the start of the apprenticeship, only 39 out of 75 subjects were in line with KOHLBERG's model (as to the numbers of persons cf. foot-notes to the tables) - arguing homogeneously in all four settings or at two adjacent stages (possibly signalling a transition phase). The other 36 apprentices, i.e. almost half of the sample, argued on two distant, three or even four different modal stages. At the beginning of their second year in vocational training and at the end of the apprenticeship still roughly 30 % of the subjects showed a heterogeneous profile of moral judgement.

Tab.2a: Homogeneity vs. heterogeneity of moral judgement during apprenticeship

time of measurement	N*	homo-geneous judgement	heterogeneous judgement			
			2 different modal stages		3 different modal stages	4 different modal stages
			adjacent	distant		
start	75	15	24	10	25	1
2 nd year	61	12	29	4	13	3
end	48	10	25	4	6	3

* Considered are only subjects with valid scores in all four domains/settings at a time.

Bold typed: results not conforming to the KOHLBERG theory

In the next step of the analysis (see Tab. 2b to 2d) we followed the three different groups identified at the first time of measurement - the homogeneous, the "transitional" and the "strictly" heterogeneous subjects - to see whether they would adjust to the KOHLBERG model during the two or three years' of their apprenticeship. At the end of their vocational training none of the originally 15 apprentices arguing homogeneously in all dilemmas still belongs to this first group conforming to the theory (see Tab. 2b). Of the 24 subjects who seemed to be in a phase of transition at the beginning of the vocational training at least 6 have not yet overcome this phase after two or three years (see Tab. 2c). Some of them have even formed a judgement pattern which is not in accord with the KOHLBERG model. With regard to the third group who was not in line with KOHLBERG's theory right from the start, neglecting the relatively high rate of missings, about half has converted to theory conforming subjects (see Tab. 2d), but 6 fresh insurance clerks still challenge the homogeneity postulate.

Tab. 2b: Changes in moral judgement of subjects arguing homogeneously at the start of the apprenticeship (n = 15)

time of measurement	homo-geneous judgement	heterogeneous judgement				missing (see footnote to Tab. 2a)
		2 different modal stages		3 different modal stages	4 different modal stages	
		adjacent	distant			
2 nd year	2	4	1	2	2	4
end	0	7	1	2	1	4

Tab. 2c: Changes in moral judgement of subjects being possibly in stage transition at the start of the apprenticeship (n = 24)

time of measurement	homo-geneous judgement	heterogeneous judgement				missing (see footnote to Tab. 2a)
		2 different modal stages		3 different modal stages	4 different modal stages	
		adjacent	distant			
2 nd year	3	15	1	3	-	2
end	6	6	2	-	-	10

Tab. 2d: Changes in moral judgement of subjects arguing not in accord with the theory at the start of the apprenticeship (n = 36)

time of measurement	homo-geneous judgement	heterogeneous judgement				missing (see footnote to Tab. 2a)
		2 different modal stages		3 different modal stages	4 different modal stages	
		adjacent	distant			
2 nd year	5	6	2	6	1	16
end	3	9	1	3	2	18

The results presented in Tab. 3 suggest that there is not only a sort of domain-specificity of moral reasoning but that there are also regressions in moral judgement competence. Whereas the family dilemma was judged rather similarly over the years - preferably at stage 3 by most of the subjects and with a maximum modal stage of 5 - especially the company dilemma dealing with external relations shows a steady “decline” in moral argumentation. Although the ordinal-scaled data do not allow to compute the arithmetic mean, this measure was added here for interpretation.

Tab. 3: Modal stage of moral judgement during apprenticeship: mode / maximum (mean / SD)

time of measurement	domain/setting			
	company: internal relations n = 46*	company: external relations n = 46*	private: peers n = 43*	private: family n = 40*
start	3 / 3 (2,16 / ,82)	3 / 4 (2,50 / ,70)	3 / 3 (2,50 / ,66)	3 / 5 (2,71 / ,73)
2 nd year	1;2**/ 3 (1,81 / ,75)	3 / 4 (2,33 / ,80)	3 / 3 (2,27 / ,75)	3 / 5 (2,41 / ,82)
end	2 / 3 (1,98 / ,74)	2 / 4 (1,93 / ,81)	2 / 4 (2,22 / , 69)	3 / 5 (2,41 / ,91)

* Only subjects with valid scores at all times of measurement for this setting have been considered.

** 2 modes: stages 1 and 2 are equally frequent.

The subject-wise analysis summarised in Tab. 4 revealed that there has been quite a lot of change in moral judgement over a relatively short period (one to three years) and with regard to all four dilemmas. Comparing the moral judgement status at the beginning and at the end of the vocational training (last triple of lines in Tab. 4) there have all in all occurred more regressions than progressions - a result which contradicts the KOHLBERGian developmental model.

Tab. 4: Directions of change in moral judgement during apprenticeship in %

period	direction of change	domain/setting			
		company: internal relations n = 46*	company: external relations n = 46*	private: peers n = 43*	private: family n = 40*
1 st year of apprenticeship	stability	43,5	39,1	46,5	47,5
	progression	13,0	26,1	18,6	15,0
	regression	43,5	34,8	34,9	37,5
	Σ	100,0	100,0	100,0	100,0
2 nd and 3 rd year of apprenticeship	stability	41,3	39,1	30,2	50,0
	progression	39,1	15,2	32,6	25,0
	regression	19,6	45,7	37,2	25,0
	Σ	100,0	100,0	100,0	100,0
start until end of apprenticeship (total)	stability	34,8	26,1	32,6	47,5
	progression	23,9	17,4	18,6	15,0
	regression	41,3	56,5	48,8	37,5
	Σ	100,0	100,0	100,0	100,0

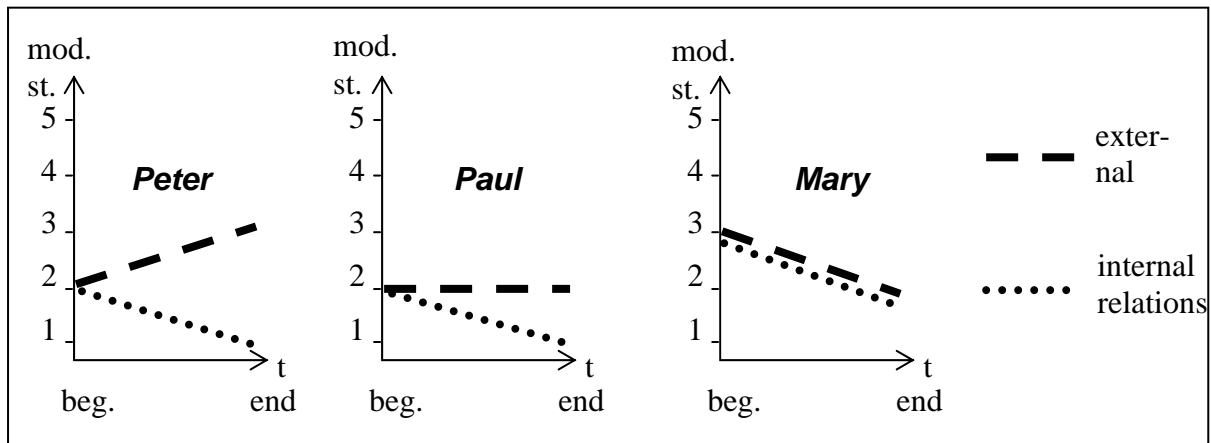
* Only subjects with valid scores at all times of measurement for this setting have been considered.

Moreover, a detailed view on the individual profiles shows that the direction of change is not synchronized between the four dilemmas. Almost all possible combinations occur and none of the subjects' original moral reasoning pattern remains just the same.

5.2. Single Case Studies

Turning to individual cases as examples for specific patterns of change during the apprenticeship, we would like to discuss the developmental history of three subjects throughout this period. All three show characteristics which are – each in its own respect – not compatible with Kohlberg’s hypothesis of homogeneity. For this report we have placed special emphasis on the two company dilemmas (ignoring the comparison of the private and the professional realm; cf. Chap. 4.2.). We refer to them as the Weber/Danz-story dealing with the company/client problem, i.e. with external relations, and the Olten/Holm-story dealing with a within company problem, i.e. with internal relations. As two of the subjects are male and one female, let us call them Peter, Paul, and Mary.

Fig. 2: Development throughout the apprenticeship in terms of the modal stage



Peter has moved from stage 2 to stage 3 in terms of the modal stage in the external business relations context, while he dropped back to stage 1 in the dilemma on internal business relations. He therefore does not seem to catch up with his progression in the field of external relations.

External relations (beginning of apprenticeship): At first, Peter basically tries to balance different interests (stage 2). “If she (Mrs Danz) is rich as a queen, she won’t get anything. If she is poor and lives in a shabby old hut, then I think it would be alright to help her” (but this only applies if she is nice (*neutral and positive affiliation vs. law/ property*)). The head of staff, who eventually learns about the transgression, should estimate the damage caused by Weber – if it is high, he should sack him, otherwise he should be kept, if he didn’t do it for his own sake but to help someone in need (*justice vs. law*).

External relations (end of apprenticeship): He argues (on Issue 1, where Mrs Danz is said to be in great need and that Mr Weber finds here very pleasant; *positive affiliation vs. law/ property*) that “[c]ontracts are stipulated to strengthen the community of insured persons, i. e. to

spread the individual risk on many shoulders. Mr Danz probably knew that his (health-) risk was quite high. Therefore he should have indicated it right away.” Here Peter clearly focuses on the overall balancing mechanism for the above-mentioned community and each participant’s role to uphold it (stage 3). He is not concerned anymore about individual interests, but about the aggregated interest of the insured people and what is his task in this respect. Consequently, he now thinks that Weber should be sued on grounds of fraud, if it could be proved that he really infringed upon his duties (*justice vs. law*).

Internal relations (beginning of apprenticeship): Here, Peter initially thinks, Holm should not help his superior, as Mr Olten himself is responsible for his situation and that it would be disastrous, if all people were cheating on each other. So this is obviously in everybody’s individual interest. But there is no allusion to any sort of responsibility entailed by the role as an employee or in relation to any other social aggregate (*neutral and positive affiliation vs. law/ property*). Peter argues that Holm should be sacked, but not because he acted against his duty. The only problem he sees is that everybody would be cheating if deeds like that of Holm were not avenged (*justice vs. law*). So again – as in the external relations dilemma on the onset –, he merely adopts the perspective of balancing individual interests within a set of individuals who have to arrange their cohabitation.

Internal relations (end of apprenticeship): Two years later, Peter not even contrasts his own position with that of his head who is in trouble, trying to balance these individual positions. His reasoning rather remains almost restricted to his personal point of view. Peter still claims that Mr Olten is responsible for himself, but the main point now is simply: “To put one’s own existence at stake for someone else would be stupid” (stage 1; *affiliation vs. law/ property*). When it is the head of staff’s turn to decide what should be done with Holm (*justice vs. law*), Peter’s skimpy answer is that “Holm should be sacked for fraud and breach of contract”. In a way this sounds similar to his reasoning in the external relations dilemma, but here Peter neither props up his decision by considering Holm’s motivation to fake the data nor by alluding to role expectations. The transgression as such seems to be reason enough (stage 1).

Paul, our second example, has not changed his moral perspective in the Weber/ Danz-story (external relations), but he has regressed in the Olten/ Holm-story (internal relations).

External relations (beginning of apprenticeship): Paul starts with a stage 1 argument saying that “Mr Danz ought to have made the correct statement right away. If he tries to cheat and consequently doesn’t receive any money, it is his own fault” (*affiliation vs. law/ property*). On the next issue he then moves up: “As Mrs Danz needs the money urgently and one can imagine how it is for her, one could in this case turn a blind eye and pay the amount” (*positive affiliation vs. law/ property*) or else (*negative affiliation vs. law/ property*): “If she’s

not nice with me, I'll behave just the same way" (both stage 2). The stress here is on the "also" which indicates that Paul takes a balancing perspective from which he then judges that in this case his own claims have to have priority (stage 2).

External relations (end of apprenticeship): Not much has changed during Paul's apprenticeship, but in the first issue (*affiliation vs. law/property*) Paul now not only claims that Mr Danz ought to have informed the company of his illness, but he now explicitly relates to his duty as the official in charge to save money for his company and that he has to think as if it was his own money. But this view does not seem to be entirely internalised as Paul says that this was what he had been told in the office. Most of the time his reasoning remains at stage 2; e. g. in the second question (*positive affiliation vs. law/property*), where he still finds that the company had enough money and that the sum could in principle be paid, if Mrs Danz were in need. This time he would ultimately decide not to pay, but not for his duty, rather because he also feels, Weber ought to look for himself and had better keep a clean slate. Paul's main point is that Weber "ought also to care for himself" and therefore rather act in accordance with the set rules.

Internal relations (beginning of apprenticeship): Here, too, Paul starts off at stage 2 and similar to the external relations dilemma (*affiliation vs. law/property*): "Nowadays you simply have to cheat, if you want to help a friend or somebody you know." As long as the relations with the superior are good (*positive affiliation vs. law/property*), Paul finds: "If this forgery is not meant to recur, it is alright. On top of this I think a peccadillo is not as bad as e. g. murder. Equally, no one is harmed by this wrongdoing." And even if it is not the superior, but a subordinate, who needs the money, Paul still thinks, Holm should help and says: "Everybody starts off in a small way, and perhaps Holm has started off in a small way as well" (stage 2; *affiliation vs. law/property*).

Internal relations (end of apprenticeship): Later on, Paul is not that helpful anymore. On the surface this parallels his development in the external relations dilemma, but the reasons are quite different: At first he says straight away: "Well, he (Holm) should fake the data here, because it is in his own interest, because he has benefits, if he helps, and it would be to his detriment not to help" (stage 1; *affiliation vs. law/property*). During the course of the interview he realises the risk of getting caught and consequently changes his mind. Now he says that Holm had better not fake: "It is true that Olten is the superior and can cause trouble for Holm, if he doesn't help him, but I think, if he gets caught, he will lose his job and he might have quarrels with Olten and he would have to work overtime and so on, but still, I mean, this renders life difficult, but he won't lose his job" (stage 1). The same applies to the subordinate (*affiliation vs. law/property*). Whereas Paul was inclined to help and willing to identify himself with his subordinate, he now only reflects on the consequences Holm might face: "Here he also should not fake, because he needn't be afraid of Mr Zinn (the sub-

ordinate). He couldn't possibly do him any harm." There are a few issues where Paul remains at stage 2 (e. g. the head of staff issue), but there is a clear tendency toward "downward development" whereas in the domain of external relations he develops in quite the opposite way.

Finally, Mary's pattern of change is that she regresses in both dilemmas from stage 3 at the beginning down to stage 2 at the end of her apprenticeship:

External relations (beginning of apprenticeship): Mary at first feels sympathy for Mrs Danz and recognises the tragedy of her situation, but points out that "after all it is a fraud to conceal the information about the illness and that's why I have no reason to order the payment". And she adds that if she had her own company, she would also expect her employees to be loyal and pass such information on (stage 3; *affiliation vs. law/ property*). The question of Mrs Danz being friendly or unfriendly is therefore irrelevant for Mary (*positive/ negative affiliation vs. law/ property*).

External relations (end of apprenticeship): Meanwhile, Mary has dropped back to stage 2 in five of the seven issues (before she reasoned on stage 3 on all seven issues). Now she does not relate to her duty anymore, but says (quite on the contrary): "This would depend on my current temper on that day. I would consider the pros and cons of passing the information on" (*affiliation vs. law/ property*). If Mrs Danz were friendly, Mary would rather "tend to remit the money, because they have also paid contributions and she has already enough worries" (*positive affiliation vs. law/ property*). However, laxly as she decides in her position as an employee, she expects the head of staff to be strict: "Executive managers ought to act in accordance with the company and therefore be consequent in all cases which do harm to the company and lay off such people" (stage 3; *justice vs. law*).

Internal relations (beginning of apprenticeship): Mary's main concern is that Holm "has worked there for years and has the duty to help his superior, if it is necessary" (*affiliation vs. law/ property*). She thus stresses the fact that there ought to be a close bond and a feeling of social obligation (stage 3). But there are instances of stage 1 and stage 2 reasoning as well, like the point that support has to be on both sides (stage 2; *affiliation vs. law/ property*) and that Holm would have a trump card against Olten, if he helped him (stage 1; *negative affiliation vs. law/ property*). But again, when it comes to the head of staff issue (*justice vs. law*), she claims that "after all, Holm has shown social responsibility for his superior. The head of staff should put himself into Holm's shoes" (stage 3).

End of apprenticeship: Two years later Mary has changed her mind: "The faking would certainly leak out and Holm's superior could easily shuffle off the burden to Mr Holm" (stage 1; *affiliation vs. law/ property*). If the superior is fair and co-operative (*positive affiliation vs. law/ property*), the criterion for faking is now whether it "carries Holm further personally, but

he should demand a written confirmation that he was ordered to manipulate the data” (stage 1). Although she has not changed with respect to the head of staff issue (*justice vs. law*), where she has remained at stage 3, she obviously has learnt during her apprenticeship, that work relations are not really guided by a feeling of togetherness and responsibility for each other or the company, but that you have to care for yourself.

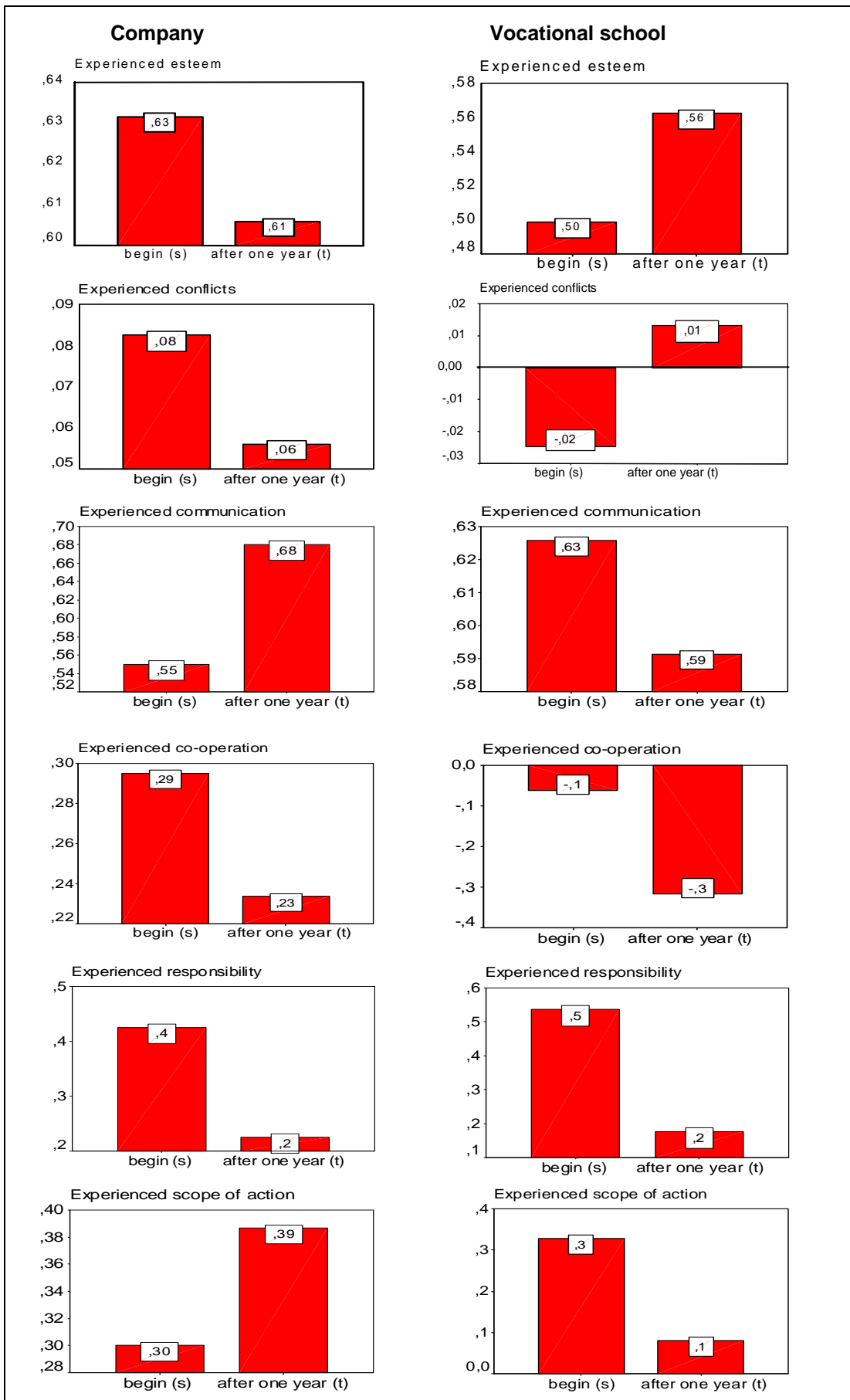
5.3. *Status and Effects of Developmental Conditions*

With respect to space restrictions we confine our analyses in this article to the conditions of moral development and their effects within the context of vocational education (again dropping the realms of family and peers). For short we speak of three succeeding measuring times, i.e. “s”, the starting point of apprenticeship, “t”, one year later, and “z”, the end of apprenticeship (whether after two, two and a half or three years). The participants of our study experienced the conditions of moral development there as shown in Tab. 5.

In the *company* all conditions of moral development are experienced as being positive. Most of them are changing in the course of the first year of apprenticeship. Students experience a decline in esteem, a more negative way of conflict solving, less co-operation and less responsibility in the course of their first year, though the changes are not dramatic (e.g. experienced esteem ,63 to ,61; as to the definition of measures cf. Chap. 4.2.). After the first year communication and the scope of action are experienced as being more positive than in the beginning.

At *vocational school* students experience a decline in four of six conditions of moral development in the course of the first year (communication, co-operation, responsibility and scope of action). Experienced esteem and the way how conflicts are solved are seen as being more positive after one year.

Tab. 5: Experienced conditions of moral development in s (begin of apprenticeship) and t (after the first year of apprenticeship)



To discover a possible influence of these social conditions on changing moral judgement competence, multiple regression analyses (stepwise) were selected. This was done according to the following strategy:

Tab. 6: Strategy of analysis

Conditions of moral development registered at the beginning of the apprenticeship (s) and one year later (t) as independent variables	→	Changes of moral judgement competence from s to z (end of apprenticeship) from s to t, and t to z as dependent variables
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There is no specific dilemma to conditions at vocational school. We consider school as a part of socialisation that might influence moral judgement competence as measured by company dilemmas. We therefore analysed a possible influence of school socialisation (alone and in combination with conditions in the company) on changes in moral judgement competence in the two company dilemmas. Regression analyses show the results given in Tab. 7. We only list significant values, however with a relatively high error range of $p < .1$ because at the given state of analysis we are not testing hypotheses already existing but looking for possible relations.

Tab. 7: Content-specific influence of conditions of moral development on changes in moral judgement competence between the beginning of the apprenticeship (s) and after one year later (t)

Model (running number)	Independent variable (date of measurement)	Beta	Dependent variable (difference between dates of measurement)	R	Adj. R. Square	Sig.
1.	Communication in the company (s)	.336	Changes in within company dilemma (s-t)	.336	.087	.042
2.	Co-operation (s) Communication in the company (s)	.397 -	Changes in within company dilemma (s-t)	.505	.212	.007
3.	Responsibility at school (s)	.414	Changes in within company dilemma (s-t)	.414	.145.	.017
4.	Responsibility at school (t)	.354	Changes in within company dilemma (s-t)	.354	.102	.027
5.	Co-operation at school (t)	- .429	Changes in the company/ client dilemma (s-t)	.429	.159	.010

All in all, changes in moral judgement competence in the within-company dilemma seem to be connected with earlier experienced communication and co-operation in the company and by experienced responsibility at vocational school. To begin with model no. 2, if co-operation in companies is not restricted, moral judgement competence seems to be fostered. The results concerning communication are problematic. In the first regression model (no. 1), when communication is shown as single influence factor, the result confirms theoretical expectations. If

communication in the company is not restricted, moral judgement competence is fostered. In the second model, however, we find a negative slope for the regression of communication on changes in moral development. We would therefore have to state that if students experience positive co-operation in combination with a negative communication culture (restricted communication) moral judgement competence will be fostered. At the moment we have no plausible theoretical explanation for this result, because successful co-operation without a positive communication structure will most probably not occur. Therefore, this finding has to be explored in more detail by single case studies still to be done.

Furthermore, we find an influence of experienced responsibility at school on the development of moral judgement competence concerning the within-company dilemma (model 3). If students experience responsibility at school, moral judgement competence seems to be fostered. Changes in moral judgement competence concerning the company/ client dilemma (Weber/ Danz) are explained by co-operation possibilities at school. But again the Beta-coefficient has a negative sign, which is difficult to explain.

Additionally, in all models that contain communication (Tab. 8) we encounter the same problem, i.e. negative correlations between communication and changes in moral judgement competence. Moreover, between s and z (begin and end of apprenticeship) there are no significant effects on the overall change (or stability) of moral judgement competence to be discovered.

Tab. 8: Content-specific influence of conditions of moral development on changes in moral judgement competence between the end of the first year (t) and the end of the apprenticeship (z)

Model (running number)	Independent variable (date of measurement)	Beta	Dependent variable (difference between dates of measurement)	R	Adj. R. Square	Sig.
6.	Communication school (t) (only school as independent variable)	-.409	Changes in company/ client dilemma (t-z)	.409	.133	.038
7.	Communication school (t) (school and company as independent variables)	-.458	Changes in company/ client dilemma (t-z)	.458	.176	.021
8.	Communication school (t) Esteem company (t) (school and company as independent variables)	-.509 .390	Changes in company/ client dilemma (t-z)	.600	.301	.007

It is rather difficult to sum up these results. Undoubtedly, there is some influence of the hypothesised conditions of moral development on moral judgement competence. However, so far it is not possible to detect a specific pattern. This might be due to the level of aggregation used for these analyses. Further analyses will therefore have to concentrate on less aggregated conditions of moral development.

Another reason for the somewhat irritating results might be found in a certain ceiling effect. At the given state of analysis it cannot be excluded that some of our apprentices, though enjoying fostering developmental conditions, are not able to move to a higher moral stage because they have already reached the highest possible level considering their status of intellectual development as ceiling. Furthermore, it has to be taken into consideration, that the modal stage measure (as well as differences between modal stage measures used in our regression analyses) is too rough and global as to serve as the dependent variable. Theoretically, it might be more plausible to apply regression analyses to the difference between the highest scores reached within a dilemma at two succeeding dates - again, controlled for intellectual limits of further development.

Finally, our deliberations on that problem up to now as well as the theoretical discussion do not account for the possibility that moral judgements are adjusted to the given community of practice as a consequence of social adaptation irrespective of developmental conditions. Effects of this type could be due to overruling affective processes like that which DECI and RYAN (1991; 1993) conceptualise as social embeddedness. That appears to be a crucial point for further research and discussion because experienced esteem on the one hand and social embeddedness on the other hand in that case could have ambiguous effects; in that case it has to be studied which conditions are responsible for the fact that one of both overcomes the other.

6. Discussion

During the first twenty years of theory development the KOHLBERG group carried on an intensive discussion on problems of measurement of moral competence (Hinder 1987). In 1987 the last book co-written by KOHLBERG himself was published (COLBY/KOHLBERG 1987) not only giving a comprehensive overview on the theory development so far but also on the rationale and the procedure of how to conduct and to interpret the Moral Judgement Interview (including the exhaustive volume II on scoring of issues, elements and norms). Since then there have been no further attempts to improve the measurement procedure despite its inherent problems

which we mentioned at the outset of this article have not been solved by COLBY and KOHLBERG.

Even if one regards these problems to be not very serious, a revision of the scoring handbook (vol. II) would still be necessary to be able to cope with another problem, i.e. the continuing change of colloquial language and the transformation of meanings of notions used in uttering moral ideas and concerns. The exemplary phrases given in the handbook are drawn from interviews carried out two to three decades ago and therefore do not fit perfectly down the line with the contemporary usage of language, especially with respect to young people. Revision of the handbook is a permanent necessity. The longer it remains undone the more researchers are at risk to disagree on how to score certain notions and phrases expressed by interviewees.

Of course, the problems of scoring are still more complicated looking at language differences between native English speakers and other people. Therefore, in comparing results of studies from different countries as well as from different research groups it is very important to be aware of sources of variance in the moral judgement data caused by vaguenesses of language and instabilities of interpretations. Within one and the same research project these difficulties have to be observed and might be avoided by trying to adjust and adhere to a certain scoring procedure. So, even if there were differences to other studies with respect to the absolute height of stage scores the relation between stage scores within a study may be looked at as a valid indicator of interpersonal differences and intrapersonal developments.

Given that proviso, our results nevertheless give reason to raise the question whether KOHLBERG's theory of moral development is still valid in each of its parts:

- (i) As a first interesting and not at all marginal result we have to state that the admission into and the way through an apprenticeship seems to be a phase of moral "turbulence" for our young people. Opposed to KOHLBERG's and many other authors' concept of change and establishment in moral development (cf. LEMPERT 1993, OSER/ALTHOF 1992) which is conceptualised as a very slow process lasting at least for a couple of years our data show that within some ten or twelve months there may often occur measurable changes in how one and the same moral problem is judged by one and the same person. This finding draws attention to the question to be clarified more thoroughly which internal processes have to be considered as the "pace makers" (or "brakemen") of moral development.

As long as it can be presumed (according to PIAGET) that all our apprentices have already reached the intellectual stage of formal operational thinking, relatively fast movements on the moral ladder going upwards may be observed only if a person of that age starts off from a low moral stage, say, one or two (COLBY et al. 1977). It can be assumed that he or she has something to catch up on and therefore proceeds at a higher speed than persons of lower age would do (OSER/ALTHOF 1992, 166). Again, also in that special case it is still unclear to which elements (“pace makers”) of the cognitive moral structure the velocity of change has to be attributed. Anyway, our data tell that moral development is not always a slow process.

- (ii) Next, it is not only the *speed* of moving downwards but in the first place the mere fact of regression that does not go together with KOHLBERG’s theory. Although we have some eight cases in our sample who do not move down, the abundance of regression occurrences throughout the four dilemma measures can neither be overlooked nor be ignored (cf. Tab. 4).

One might say, these regressions are the result of performance measurement in t and z. But as was discussed in Chap. 2 this objection is not acceptable. As described above, our data stem from either the MJI (KOHLBERG) or the SRM (GIBBS/WIDAMAN). There is no ranking of pre-presented moral statements as is the case in the DIT (Rest) or the MUT (LIND). Outcomes from the latter two instruments would overestimate moral competence, anyhow (HINDER 1987). And, on the other hand, there is no reason to suspect that lower stage measures are due to the content of stories (especially to their more or less hypothetical character) and more so to differences in the measurement procedure in s, t, and z.. As the dilemmas and the questions we have administered year by year were always the same and as these dilemmas do not present real life stories but hypothetical conflicts, we argue that the measurement outcome represents an indicator for moral competence in an exact analogy to the KOHLBERG procedure. We followed KOHLBERG’s relatively expensive approach not least because we wanted to obtain data comparable to studies carried out in the “orthodox” KOHLBERG tradition. The only major difference between our method and that of the MJI is that we computed a modal stage for *each* dilemma (as a representative for a certain sphere of life) whereas the KOHLBERG procedure determines only one overall mode across his three dilemmas. Of course, the likelihood of getting results indicating regression is the lower the more single scores are merged in one modal value because by that procedure variance within the original data is swallowed.

Looking at our results in terms of theory they tell us in the first place that reasoning on different stages is not only at many persons' cognitive disposal but also seems to make sense for them. REST's idea to reconstruct stage bound reasoning as a matter of using different schemas (REST 1979) seems to match much better the results of our study (and of many others, as was described in Chap. 2) than KOHLBERG's concept of structural wholeness.

- (iii) This last remark leads us to the third criticism to be drawn from our results. As was shown in some detail, in a long term perspective most apprentices tend to make stable differences in judging moral conflicts of different content. As far as our four dilemmas are valid representatives of, say, (a) team work, (b) market orientation, (c) world of peers and (d) family affairs, i.e. for more or less distinct spheres of life, the new hypothesis which diverges from KOHLBERG's theory but fits our findings reads as follows: Given sufficient rich social experience in different fields of life the level of moral judgement of a person tends to adapt specifically to the predominant level of moral practice in the respective field – a “syndrome” which we call moral segmentation.

As a consequence if a person exhibits equal modal stages measures in different spheres of life, that would not be an indicator of moral homogeneity (in the sense of KOHLBERG's hypothesis of structural wholeness) but could be due to the fact that this person encounters accidentally similar modes of moral practice in that various fields of action. Moreover, he or she might have been following a tendency to actively seek fields of moral equivalence.

Furthermore, going beyond the modal stage score which expresses the overall measure of moral competence related to a certain “sphere of life” the next level of analysis is given by the so-called issues. As was defined above, an issue is characterised by two conflicting values to be considered in moral reasoning. E.g. in our Holm/ Olten-story (the within-company dilemma) one of the conflicting value pairs is law vs. affiliation (It is not allowed to fake the figures of a sales report; there is a very close personal relationship between Holm and Olten). In the Weber/ Danz-story (the company/ client dilemma) the same issue has to be judged (Is it allowed to disburse the total policy value only because the shrieving dependant is a very nice person?). Looking at our data on that level of analysis it appears that segmentation takes place already here. Our ap-

prentices tend to discriminate situational contexts even if the same issue has to be dealt with (BECK/HEINRICHS/MINNAMEIER/PARCHE-KAWIK 1999). To state it in a more formal way: There seems to be an interaction between issue and situational context, i.e. it is not the issue alone as is not the situational context alone that causes heterogeneous moral judgements.

It is still too early to take the new hypothesis stated above for granted. There is further need for studies which look more carefully at the notion of “sphere of life” in order to unveil the hidden logics which bring about the connections between situations, problems, and topics a certain person subsumes to one and the same moral (stage) principle.

Regardless of the future findings yet to be discovered, there is already an explanatory idea at hand for moral differentiation to be expressed in sociological concepts. It says that our modern mass societies characterised by division of labour and of many other social tasks have developed subsystems each of which is based on its own internal principles (family, neighbourhood, leisure, sports, healthcare, education, economy, politics and so on). These principles depend on the different social functions to be fulfilled by that subsystems. Speaking very generally one could differentiate several fundamental types of functions assigned to certain principles, e.g. competition (stage 1 and 2 principles of strategic thinking), co-operation (stage 3 principle of accomplishing personal expectations), co-ordination (stage 4 principle of orientation towards systems’ goals), and constitution (stage 5 and 6 principles of thinking in terms of social contract(s)).

Individuals living in complex societies of the kind just mentioned have to divide up their social life in playing several roles which in turn are to be conceived as bundles of functions adjusted to the subsystems. The subsystems in turn differ in their outputs contributing to the whole social system and according to that they function by following different internal rules including moral principles.

Given that, it turns out to be necessary to rethink the traditional Occidental ethics propagating the teachings of ethical universalism (which culminates in KANT’s Categorical Imperative). This is not a problem to be solved within this paper. But it does not seem to be unlikely that in the end a type of ethical partialism will be found taking into account the structure of modern societies. KOHLBERG’s idea of the structural

wholeness of moral thinking is without doubt the psychological counterpart to the traditional ethical universalism in sociology and philosophy (which is a meaningful ideology for small groups, e.g. hordes and tribes). Analogously, differentiation (or segmentation) in moral thinking corresponds to an ethical partialism (or relativism). As it were, it is not a question of philosophical speculation but one of unprejudiced empirical research to reveal which structures, laws, and procedures govern our moral thinking in real life today.

One of the most important and most promising tools in studying moral thinking is to look at the social incentives which influence the development of mental moral structures. To the same degree as they vary we have to expect variations in interpersonal and intrapersonal differences of morality (at least as long as we don't take into consideration genetic moral dispositions). In doing research on the developmental conditions of moral judgement competence we are still at the very beginning of getting insight in that fine-meshed tissue. Admittedly, our first attempts in that direction have not been very successfully (Chap. 5.3.). This is obviously due to the complexity of psycho-social networks. But it is also a matter of advancing in the analysis of our data which we have not completely exhausted so far.

In any case, one has to be aware that there is no easy and quick way towards a clear picture of those interrelations. Regarding social partners (the one side of that interrelations) the set of constellations and processes to be taken into account is nearly infinite, and with respect to individuals (the other side) considerations not only have to focus on cognitive and affective factors composing moral thinking but also on the processes of social perception, interpretation of situations, moral sensitivity, and moral motivation. Embedded in the research programme on socialisation, the findings on moral development, finally, will have to prove compatibility with other special and also with the general theories in that field. It might be expected that at the provisional end of that long lasting process a unifying theory of socialisation may be reached which offers general explanations and notions for conceptualising the interaction between individuals and society as well as the underlying developmental processes.

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