TEACHING GENESIS: A PRESENT-DAY APPROACH INSPIRED BY THE PROPHET NATHAN

by K. Helmut Reich

Abstract. The prophets Nathan (2 Samuel 12:1–15) and John the Baptist (Mark 6:16–28) had comparable tasks before them: to convince their respective kings about the wrongs of taking somebody else's wife and marrying her. Nathan succeeded, while John failed and furthermore lost his life. What made the difference? One possible explanation is that Nathan proceeded in two steps: (1) Tell an interesting, nonthreatening story that nevertheless makes the point at issue; (2) transfer that message to the case at hand. In contrast, John used a direct approach, which raised apprehension, even fear (on the part of Herodias, the woman involved), and led to failure. That lesson has wider applications, as illustrated here for teaching the biblical Genesis narration. The other ingredient in this teaching is relational and contextual reasoning (RCR), the use of which is also indicated for other issues besides teaching Genesis.

Keywords: cognitive development as aim of education; differentiating; integrating; logic; Nathan's detour as shortcut; overcoming cognitive conflict; relational and contextual reasoning (RCR).

What teacher of religion has not experienced failure, even if he or she was not beheaded like John the Baptist? When the students just "close the shutters," insist, for instance, that science has proven the Bible wrong and that the Genesis narrative of creation is simply absurd? Suspecting that at least some of our students, mainly sixth and ninth graders in a German

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comprehensive school (*Gesamtschule*), might not take easily to Genesis 1–2, Anke Schröder, the religious educator with whom I team-taught, and I adopted an approach inspired by the prophet Nathan's. To recall briefly that account (2 Samuel 12:1–15 NRSV): King David had given orders that led to the death of Uriah so that he could marry Bathsheba, Uriah's wife. Nathan's task was to make King David aware that he had done wrong. Nathan took a detour by telling the king a story about a rich man who had a guest but was loath to take a sheep from his own flock to prepare a meal. Instead, he took his poor neighbor's only sheep. When David heard this, he became angry and said "the man who has done this deserves to die." Then Nathan said to David, "You are the man! . . . You have struck down Uriah the Hittite with the sword, and have taken his wife to be your wife." David said to Nathan, "I have sinned against the Lord" (cf. Psalm 51). By choosing this detour Nathan not only avoided activating David's defenses but actually gained his cooperation in making the point he wanted to make.

Because an inductive presentation is usually easier to follow than a deductive one, I begin with what Schröder and I actually did in the classroom, then discuss the preceding didactic considerations, report on more classroom action, and finally provide a glimpse into the undergirding psychological theory.

TEACHING GENESIS IN FIFTH AND SIXTH GRADE

Given the difficulty of explaining to our students convincingly that the Genesis narratives about the origin of the universe and what it contains are not scientific reports, we decided to make a detour à la Nathan by using a different theme to demonstrate two ways of looking at the same issue, namely, time (Reich 1996, 138; 1997, 179-80, 2003a). Schröder projected Salvador Dali's well-known drawing of a melting/dripping clock (James Henry Grady collection, Atlanta, Georgia) on a large screen in front of the class and invited the students to comment, and they did: "Oh, someone is trying to draw a clock who can't draw; it never looks like that!"; "some figures are on twice"; "seven"; "eight"; "six too; "and nine"; "some are quite close together, and others further apart"; "because sometimes time is slow, like when one has to wait"; "and sometimes it's quite fast, like when I work at my computer"; "and some figures run backward, like when you remember earlier times." Students became aware that the artist wanted to depict the human experience of time, and perhaps the life course, over against a mechanical linear understanding of time. Then came our question: "And if watchmaker Miller would tell you that a real clock looks like that one (we pointed to the clock on the wall), not like the drawing, what would you say to him?" Answering, the students explained in their words the difference between a blueprint of a clock used for manufacturing or repair work and an artist's symbolic representation (Reich and Schröder 1995, 12–14).

That classroom scenario was part of our effort to familiarize students with the theme "Humans and Nature," respectively "Genesis." For us teachers, the first two chapters of the Bible are an ode to God, the Creator of the universe, the plants, animals, and humans, not a scientific report as presently understood. A corresponding analysis (Table 1) led to the tentative conclusion that for reasons of developmental psychology a direct approach was not recommended (Reich 1989; 1990; Fetz, Reich, and Valentin 2001): younger students (11 to 12 years) might find it difficult to keep distinct the complex biblical/religious worldview and the scientific worldview, yet to coordinate them; older students (15 to 16 years) might be tempted to adopt prematurely only one of the two worldviews. Hence, after reading the biblical text (Genesis 1–2) in the class, we proceeded in the fifth and sixth grades as indicated above.

After it had become clear that the students could deal with the clock/ time theme both anthropocentrically/symbolically and objectively/linearly, we made the second step of transferring that general insight (looking from two rather different perspectives at the same issue) to the Genesis narratives and scientific accounts of the origin and evolution of the universe. The students had biology classes, and some belonged to a "green team," the nature preservers. The task put to the class was to elaborate tables of content for three hypothetical books to be written about the following themes: (1) biblical Genesis, (2) (evolutionary) biology, and (3) green-team

Table 1. Analysis of content and structure of the teaching unit "Humans and Nature," respectively "Genesis" (Reich and Schröder 1995, 86).

Natural sciences	Relationships between religion/ theology and natural sciences
Big Bang, cosmogony, cosmology	Whenever theology makes factual statements about the material universe which fall into the domain of the natural sciences, then theology should avoid, as much as feasible, clashes with state-of-
Origin of life, evolutionary chain	the-art scientific knowledge
up to human beings	Given its tradition, theology can ask science questions about the objectives, purpose, and meaning of science, and the responsibility of its practitioners
Humans learn ever more about nature, become more powerful and dangerous	Both can learn from each other how to gain deep and dependable knowledge
	Big Bang, cosmogony, cosmology Origin of life, evolutionary chain up to human beings Humans learn ever more about nature, become more powerful and

activities. We asked, "Which book corresponds to the meaning or the message of Dali's melting/dripping clock and which to watchmaker Miller's clock, the classroom clock? To our satisfaction, and somewhat to our surprise, the students had no difficulty spontaneously pairing off Dali's clock with the biblical Genesis (book no. 1) and Miller's clock with biology (book no. 2)/ green team activities (book no. 3). The comprehension of the respective properties and relationships was deepened through the actual production of the content tables and subsequent discussion. The theme was always "Humans and Nature," but it was looked at from the three rather different perspectives. The discussion was particularly fruitful when outof-context entries in a given book could be redirected into the book where they belonged. That permitted a sharpening of the respective characteristics of the three books and their relationships. The students presented the result on the blackboard: The green team needs to know biology to be effective, and the results of their efforts can conceivably furnish new insights to the biologists. Religion can enhance motivation of the green team, and biology can furnish to religion new evidence about some of nature's marvels, being more reasons for worshipping God (Reich and Schröder 1995, 14-17).

As much as we can judge, at least some students had won new insights after six weeks of effort. A sixth-grader recorded his ideas about God's Creation as follows:

I surmise this: When the Big Bang came about, God has seen to it that it all happened in the right order, and he has also prepared the basis for the life of humans, of animals and of plants, and introduced that into the various processes following the Big Bang. Thus human, animal and plant life was bound to arise with his help. Which are my hesitations? I am not quite sure about what I just said. (Reich and Schröder 1995, 70–71)

Experts such as scientist-theologians will express such ideas more knowledgeably and in more technical terms (cf. van der Meer 1996), but are their insights much deeper? We are obviously dealing with a difficult question that has been debated a long time.

PRECEDING THEORETICAL CONSIDERATIONS

Why did we proceed as we did? Inspired by the prophet Nathan, we turned to the teaching approaches researched at the School of Education of Fribourg University (Oser and Baeriswyl 2001). Model case no. 2, "classroom activity which furthers structure-transforming development," met our needs:

- A well equilibrated, cognitive structure in one area becomes disequilibrated because of problems, dilemmas, or tasks that the person cannot solve immediately.
- 2. Through this disequilibration, the old structure dissolves, and new elements of a yet unknown structure become visible.

- 3. The new elements appear to be of high importance; they lead to a transformation or a dismantling of the old structures, or the old elements, respectively.
- 4. The new elements are integrated into a new structure; all the old elements are reevaluated and reintegrated into the new structure, thereby receiving a new function. (2001, 1052)

Provoking a disequilibration is required the more, the more the students' position is "frozen." Using Nathan's method (as indicated above) in such a process aims primarily at avoiding feelings of being personally attacked and then reacting with defense and immunization strategies. The corresponding *first* step chosen of the two-step procedure furthermore should be cognitively simpler than would be a *single* step toward the objective of the lesson at hand. For these two reasons (neutral emotions and cognitive facilitation), such a detour can also help to get the students off their mental balance more easily, to disequilibrate their mental structures (point 1). Similarly, point 2 (and later on 3) may benefit from Nathan's detour. The transfer from the result of step 1 (differentiating the notion of time into idiosyncratic human time and "objective" linear time) to the issues of step 2 (the contents of the three books) visibly involves arriving at an adequate solution by way of comparing and contrasting the various elements to be "transferred" as well as the related views of the other students. Doing so furthers the building up of new mental structures.

There was yet another objective to be achieved in parallel, as will be justified shortly. That objective was to stimulate and support students' differentiating (recognizing and using differing categories for characterizing partial aspects) and integrating (establishing various connections and relations in view of getting to a holistic view—Reich 2002). The hypothesis was that this would further their cognitive development. It seemed to us, by the way, that differentiating and integrating was simpler in the clock case than in that of Genesis. Hence, also in that respect Nathan's detour should be advantageous.

When selecting a first step for teaching a somewhat difficult subject matter by way of Nathan's detour, it is not only simplicity of the issue and a positive (or at least neutral) emotional tone that are important, but also "transferability." By this I mean that various details must be right in order to facilitate the transfer as opposed to making it more difficult. Suppose, for instance, that one wants to explain surfing on the ocean waves in terms of driving a car on a road with linked traffic lights. Clearly, this only works fully as desired, if the linked traffic lights have been experienced as actually having wavelike characteristics (the "green wave" functioning in parts of Germany). If the transfer is to be achieved, the parallelisms and the limitations of step 1 and step 2 must match as closely as possible. Furthermore, in the case of Genesis, both step 1 and step 2 had to involve elements of relational and contextual reasoning (RCR), to be explained shortly.

A CLASSROOM EXAMPLE FROM 9TH AND 10TH GRADE

The situation in 9th and 10th grade was more difficult from the start in that a majority of the students agreed (at least tacitly) with the following statement by one of them: "I do not believe that God has made the Earth. The Genesis story and the scientific evidence contradict each other. But the scientific proofs are more convincing" (Reich and Schröder 1995, 97).

We thought that it was counterproductive to start a factual discussion from an opposite viewpoint à la John the Baptist (Mark 6:16–28). Contrary to Nathan's detour with King David, John the Baptist told King Herod straight away how wrong it was to marry unlawfully his brother's wife. Not only did John not convince Herod, he lost his life in the process. We needed to make a detour because in our view the students lacked the required conceptual and epistemological knowledge to really debate the issues at hand and might just reject any discussion, being convinced that they were right and had nothing more to learn. Apart from stimulating their differentiating and integrating (reported in Reich and Schröder 1995; Reich 1996; 2002), we thematized "logical contradiction" (at the same time an exercise in differentiation) and "plausibility criteria."

We began by reinforcing students' awareness of the difference between the literary form of a poem and a scientific report. To that effect I read aloud the beginning of two poems, Frühling (Spring) by Eduard Mörike ([1829] 1997, 684) and Herbst (Autumn) by Rainer Maria Rilke (Schnekenburger 2001). They read something like "Spring again flies its blue ribbon in the air; sweet, familiar scents roam about full of foreboding. . . . " and "The leaves tumble downward as if coming from far away, as if distant gardens in the skies were withering; they fall with negating gesture. . . . " It was not too difficult to come to the following agreement: these poems are not an invitation to look for blue ribbons in spring and for stratospheric gardens in autumn. Transferring that understanding to Genesis was at least clear in principle: each of the various literary forms used in the Bible has its own form of "logic."

At that point the following difficulty arose: The students had a notion of logic different from that of philosophers. For the students "logical" was more or less synonymous with "empirically provable," "self-understood," "true for everybody," and the like. Once more, to move that roadblock out of the way, we proceeded stepwise. First we established with the help of some concrete examples (like pouring a liquid from one container into another and back again, thereby reestablishing fully and precisely the initial situation) the preconditions for the applicability of formal binary logic. Given that logic, if in a logical contradiction one possibility is true, then the contradictory one is of necessity false—if the child is a boy, it is necessarily not a girl. Such conclusions are applicable if, in particular, the elements (like the liquid and the container) are separable (no intrinsic

relationships like between mother and child) and permanent in time, at least as long as the conclusion is deemed valid.

Then Schröder told the class the love story of Elke and Ansgar, which takes place in the students' life world (Reich and Schröder 1995, 41). When Ansgar explained to Elke that he could not go to the disco with her because he felt unwell, she went with her best girlfriend. There, Elke met a boy she liked and let herself be kissed by him. At that very moment, Ansgar appeared and reproached her for having been unfaithful to him. Her answer, "Why do you spy on me? Anyway nothing has happened, you and me are together." In the animated discussion the students emphatically took the side of Elke or of Ansgar (gender-unspecifically). Finally it became clear, though, that the future of their relationship cannot be determined with the help of formal binary logic, because their emotions (and cognitions) are neither intrinsically independent nor constant with time: the mutual confidence had been shaken. Further examples, such as the difference between "where there is smoke, there is smoke" (an identity, which is valid in all time and space, but not very helpful) and "where there is smoke, there is fire" (a probabilistic statement which may be helpful but not necessarily true) contributed to differentiating further the notion "logic(al)" (Reich and Schröder 1995, 41).

Regarding the *plausibility criteria*, we reviewed historical developments. In the beginning of recorded history, myth was that form of "evidence" which fulfilled the highest demands for plausibility: It was simultaneously an explanation of the world and a guide for acting in that world. It carried such an aura of factuality that the listeners identified spontaneously with the dramatis personae without ever questioning their righteousness. As an example, we considered the case of ordeals, which played a considerable role in the trials of many early cultures and in European Middle Ages until about 1200. After that, the next step in the historical development was the emergence of natural philosophy and then of science as candidates for fulfilling the highest demands for plausibility. Now, in postmodernism, the very concept of plausibility is under attack, and for a number of persons esoteric teachings enjoy more credibility than science. But instances of myth still exist, such as that of the unerring, infallible computer. At least some students agreed that the "truth content" of biblical narratives cannot simply be dismissed on the basis of modern criteria applicable to the natural sciences. The verisimilitude neither of a scientific nor a biblical worldview can be proven beyond the shadow of a doubt. Eventually, each of us, whether by design after careful reflection or by omission, chooses one worldview or another, or a particular combination of both. Students participated actively in such discussions. Obviously, it was not possible to change the opinion quoted above in a few weeks, but students holding such views at least stated them less apodictically, that is, no longer as if there were no reasonable alternatives.

REQUIRED BACKGROUND KNOWLEDGE AND CONCLUDING REMARKS

What persuaded us to proceed as indicated? Psychological laboratory studies have shown that a certain form of thought can contribute to the coordination of differing descriptions, models, explanations, or theories, none of which is obviously erroneous (Reich 1995; 1996; 2002; 2003b), this particularly in regard to the origin of the universe (Reich 1989; 1990; Fetz, Reich, and Valentin 2001). After a fuller understanding of that form of thought it was rebaptized "relational and contextual reasoning" (RCR). Ideally, it develops from level I to level V. Reasoning at level V involves mastering differentiating, integrating, and understanding the limits of the applicability of formal binary logic as well as (implicit) use of an alternate trivalent logic. The three "truth values" are *compatible*, *incompatible*, and *noncompatible*. The latter implies that of two competing descriptions, models, explanations, or theories, one is more relevant in one context, the other in another context (Bedau and Oppenheim 1961).

RCR can also be helpful at the margins of religious education, for instance for understanding the solution of the Investiture Controversy in continental Europe (all examples are elaborated in Reich 2002). This controversy was about investing clerics with a bishopric: was it the Pope's prerogative, or the king's? After much warring, the "RCR-inspired" ending in 1122 gave that prerogative initially to the chapter of canons of the cathedral pertaining to the vacant bishopric. They proposed a candidate, who was then invested with his temporal power by the king and the spiritual (ecclesiastical) power by the Pope. Other issues, which can benefit by replacing an exclusionary either/or by a context-related both/and, concern, for instance, dealing with anorexia/bulimia (psychotherapy vs. medication), the use of illegal narcotics (prevention, survival help, rehabilitation, fighting the dealers), and nuclear power stations (technical issues vs. human competence and performance). Even if a solution of a controversial debate is not immediately in sight (it took more than two hundred years to "make peace" between the particle theory of light and the wave theory of light), differentiating, taking into account the context, integrating, and above all, abstaining from excluding the competing theory from consideration will further advance our understanding (e.g., Murken and Schah 2002).

The present experience in the classroom could equally be used for demonstrating the advantages of joint research projects by practicing teachers and university researchers. The teacher contributes his or her knowledge of the school context and the students, besides guaranteeing the continuity of the efforts in the classroom; the researcher introduces the theoretical foundation and the systematic evaluation.

Summing up, I hope to have intimated that in suitable cases Nathan's detour can bring the following advantages to teaching: approaching somewhat difficult new materials by way of a simpler instance, avoiding or reducing the danger of early emotional and mental blockages, and the furthering of psychologically desirable transformation and development of mental structures. Where applicable, RCR reinforces the effects of Nathan's approach, but it can also be used solely in its own right.

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