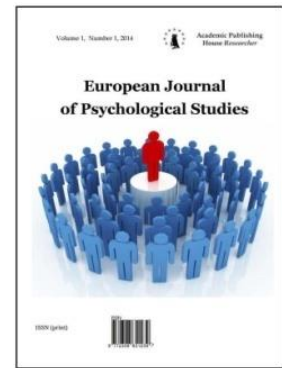


Copyright © 2016 by Academic Publishing House *Researcher*



Published in the Russian Federation
European Journal of Psychological Studies
Has been issued since 2014.
ISSN: 2312-0363
E-ISSN: 2409-3297
Vol. 8, Is. 2, pp. 68-107, 2016

DOI: 10.13187/ejps.2016.8.68
www.ejournal12.com



Developmental Psychology as Answer to the Question: Can the Human Disciplines Achieve Scientific Foundations Comparable to Biology in Consequence of Darwin, or to Physics in Consequence of Newton and Einstein?

Georg W. Oesterdiekhoff

Karlsruhe Institute for Technology, Germany
E-mail: Oesterdiekhoff@t-online.de

Abstract

Every human discipline, including the social sciences, depends on a general theory of the human being. The article argues that developmental psychology is the most fundamental theory of the human being, more relevant than any other theory of the human being such as rational choice, behaviorism, psychoanalysis or whichever. The crucial role of developmental psychology both to the theory of the human being and to the humanities originates in the fact that the biggest part of the premodern humankind from the Stone Ages up to recent times occupied psychological stages typical for children aged 5 to 12, while only humans socialised in modern societies during the past few centuries or generations attained stages typical for the adolescent stage of formal operations. This process of psychogenetic advancement has by no means finished by now but is still running right across the globe, with backbenchers and frontrunners. Without this reference point the process of globalization, the problems of the developing and threshold countries, and the many cultural conflicts and crises are not explainable. Formerly great traditions of the humanities knew about the childish psyche of premodern or primitive man, especially between 1840 and 1940. Since the victory of the two main ideologies of our time, cultural relativism and universalism of mind, over the theory of developmentalism during the Seventies of the past century the knowledge about the psychogenesis of humankind, accomplished by the prewar traditions, was almost totally lost. However, the two ideologies, born for political and not scientific reasons, have destroyed the foundations of the humanities right across the five continents and the disciplines. Their recovery is only possible by the installment of the theory of developmentalism as the fundamental theory of the human disciplines. It is necessary to restore the great prewar traditions and to improve them alike. This article shows that the structural-genetic theory programme, developed over the past 30 years, goes even beyond the fathers of developmentalism. It shows that developmental psychology explains the whole history of the humankind, the history of the human being, his mind and consciousness, the history of population, economy, society, politics, law, religion, philosophy, sciences, law, morals, violence, delinquency, manners, arts, literature, etc. Therefore, the new theory programme imparts to the human disciplines the fundamental theory evolutionary theory brought to biology, and quantum mechanics and relativity theory to physics.

Keywords: fundamental theory to the human disciplines, developmental psychology, psychological stages, primitive man, modern man, social evolution, world history, civilization process.

1. Introduction

A general theory of the human disciplines depends on a general theory of the human being. Every human discipline deals with humans as the central subject, no matter which discipline is in focus. However, which theory fulfills the requirements to deliver deep insights into the human nature? The article argues that developmental psychology provides the knowledge the human disciplines need in order to base themselves on new grounds and to gain insights that will revolutionize their knowledge. Cross-cultural psychology over the past 80 years have evidenced that premodern adult humans did not establish the fourth stage of human development but stood on psychological or anthropological stages of humans known as preoperational or concrete operational stages of human development. The whole premodern humankind occupied anthropological stages of children aged 5-12, while humans of the modern, industrial civilizations attain stages of humans aged 10-25. The differences concern the whole range of psyche, personality, logic, physics, social affairs, morals, politics, and religion, the main categories of reason and the basic patterns of world understanding, that is, the whole psychoneurological system. This knowledge delivers the key to understanding the history of the human life on earth over the past 200.000 years, the history from the Stone Ages to modern civilization, the history of population, society, economy, culture, sciences, philosophy, law, politics, morals, manners, lore, and religion, and the contemporary world divided in nations staying on different levels. The human disciplines such as linguistics, archaeology, philology, philosophy, economics, sociology, ethnology, psychology, political sciences, religious studies, etc. study these phenomena. The structural-genetic theory programme has shown that developmental psychology establishes new foundations to each of these human disciplines. Their reconstruction will both erect higher forms of theory building and deepen their foundations. The new theory allows new insights regarding any study of any historical phenomenon studied by the single human disciplines from the history of language over the customs of burial and punishment law to the rise of sciences or democracy. Moreover, the new theory provides a new dimension to the meaning of interdisciplinarity. It breaks apart the borders between psychology, sociology, history, ethnology, etc., showing their interdependency and relatedness in a completely revolutionary way. Therefore, the structural-genetic theory programme has imparted to the human disciplines a breakthrough comparable to the impact of Darwinian revolution to biology and relativity theory and quantum mechanics to physics. It is the first true revolution ever happening in the history of the human disciplines.

The humanities and social sciences are divided in numerous disciplines such as archaeology, philology, linguistics, Egyptology, ethnology, economics, sociology, political sciences, history, psychology, philosophy, pedagogics, etc. Usually, representatives of these disciplines do not ask for a general theory that concerns and encompasses all of them, giving them common foundations and assembling them under one roof. Even if they call for interdisciplinary approaches they don't think about the idea that there could exist a common theoretical foundation to all of them.

Moreover, even in the single disciplines themselves there usually does not exist any thorough and encompassing theoretical unity. Disciplines such as history or Sinology or philology are practically free from any fundamental theories. Disciplines such as economics, sociology or psychology are divided in numerous approaches and schools that have not much in common. Even if many of these schools have demands to cover the whole range of their respective discipline others may contest these demands. Against this background it appears as a mere illusion assuming that there could exist a general theory that bases every human discipline, by leading all of them to superior theoretical foundations which cause far-reaching improvements regarding their whole respective framework. It appears to be fantastic that there could be a theory that makes possible a radical revolution to the foundations of each of the human disciplines, comparable to the revolutions in biology in consequence of evolutionary theory or in physics in consequence of quantum mechanics and relativity theory. One could say that the human disciplines never had such revolutions and that it would be almost impossible that such revolutions could ever take place because the human disciplines are of another kind as the natural sciences, not allowing such strength of theory building and therefore not exposable to groundbreaking revolutions.

However, there were some weak tries in the human disciplines to base them generally, for example, the sociologies of Comte and Marx, the folk psychology of Wundt, and the philosophy of Hegel. Obviously, these theoretical tries weren't convincing and weren't strong enough. Of course, their theoretical strength and scope cannot be compared to the achievements of evolutionary

theory, quantum mechanics and relativity theory. Though, sometimes authors remarked the difference between human and natural disciplines concerns that the former ones are more complicated and more tricky, so that they need more time to evolve and to elaborate, a fact being already evidenced by their comparably later origination in time. Should this be the case then it could be that earlier or later those breakthroughs appear in the human disciplines the natural sciences experienced for the first time 1687 and for the second time 1905, in case one wants to confine the number of breakthroughs related somehow. Seriously, there does not exist any reason why the human disciplines should not originate fundamental breakthroughs.

Moreover, I am quite sure that the structural-genetic theory programme delivers the equivalent to the breakthroughs in the physical sciences mentioned. The first endeavours that prepared this breakthrough were undertaken during the era of Enlightenment, then more and more elaborated from generation to generation, with drawbacks and breakthroughs, in order to be born or adequately manufactured during the past 30 or 40 years. Which conditions must be given to make this breakthrough possible?

Thinking about the commonality that concerns every human discipline leads to the idea that every human discipline deals with humans. A theory of the human being is something all these disciplines resort to, that is, the improvement or a radical revolution concerning the theory of the human being could impart to every human discipline likewise a radical revolution concerning their foundations. This would imply that the previous lack of an appropriate theory of the human being has caused systematic failures regarding the foundations of every single discipline, affecting more or less the most or all of their achievements and contributions. Previous theories of the human being such as philosophical anthropology, behaviorism, psychoanalysis, intelligence research, sociobiology (evolutionary psychology) or rational choice obviously did not cause this breakthrough regarding the theory of the human being requested for any revolution of the human disciplines. This implies that the knowledge these theories of the human being offered was too weak in order to cause a breakthrough of that amount and explosive character one has to provide when one wants to see the human disciplines rebuilt on much higher foundations than ever before.

The structural-genetic theory programme, however, has to offer evidence that the human being of the past stood on psychological stages of children aged 5-10, while only the human being of the modern industrialized nations has advanced to psychological stages of adolescents and adults aged 10-25. That is, the modern human being stays on developmental stages usually 5, 10 or more developmental years higher than the premodern human being. Thus, the modern human being manifests completely different patterns of mind and behavior than the premodern human being does, regarding the whole range of logic, physics, social affairs, politics, law, morals, and religion. The notions leading to this theory were prepared by psychology and social sciences especially since 1840, with an early top of 1880-1940, and again with new breakthroughs in the time from 1970 up to now. The new theory programme mentioned is only the culmination of nearly 200 or 250 years of data collection and theory construction. The main stations of the theory construction related are connected with names such as Romanes, Chamberlain, Schultze, Werner, Hall, Piaget, Luria, Lévy-Bruhl, Hallpike and Oesterdiekhoff. That children and premodern humans share basic patterns of mind and psyche was described by practically every founder of developmental psychology, most fathers of psychoanalysis, many main representatives of the historical disciplines such as ethnology, sociology, philology, history, and other disciplines. The hottest phase of this theory was between 1880 and 1940 where it had the status of a widely accepted doctrine.

Every human discipline is a historical discipline, without any exception. The human disciplines describe the historical development of language, population, economy, social structures, culture, politics, law, morals, manners, religion, philosophy, sciences, worldview, arts, literature, music, etc. If one does not know anything about the change of the human being over time then misinterpretations of the historical development of these subjects are unavoidable. Both early stages and historical courses of these phenomena cannot be rightly explained and described when providing that ancient humans had the same psychological structure as humans have today. This far-reaching misinterpretation is to find in most books ever written in the history of the human disciplines. The earlier stages of the phenomena and their historical developments are usually wrongly described because the historians overlooked the divergent psyche of ancient humans and the impact of this divergent structure on the phenomena related. Only by provision of

the right reference point, the fact of the childlike psychological structure of ancient man, the early stages and the historical developments of the areas mentioned are rightly discernible.

Of course, especially these authors who adhered to the theory of psychogenesis in the prewar era presented contributions without the mistake mentioned. Or, many conducted research as if they knew that the explanations should match to the psychogenetic theory, or they came close, basing on their knowledge of the phenomena, to the psychogenetic theory without having any idea of that. However, the history of the human disciplines is full of misleading and erroneous contributions coming from the lack of the appropriate theory of the human being.

Those authors who followed the psychogenetic theory or came close to the structural-genetic theory programme, that is, knowing of the childlike stage of the premodern human being, already contributed to the reconstruction of the history of culture and humankind, namely of the history of the areas mentioned. LePan (1989) reconstructed the history of English literature in terms of developmental psychology, Brunner-Traut (1996), Gablik (1976), and Oesterdiekhoff (2013a) did the same regarding the history of arts, Radding (1985) regarding the history of the Middle Ages, Ibarra (2007) regarding the history of the Maya culture, Hallpike (2004) and Oesterdiekhoff (2009b, 2012a, 2016a, g) regarding the history of morals and violence, Kälble (1997), Hallpike (1979), and Oesterdiekhoff (2009a, 2011, 2013a) regarding the history of worldview, physics, and causality, Piaget (1975, vol. 8-10, with Garcia 1989) and Oesterdiekhoff (2009a, 2011, 2012a, 2013a) regarding the history of sciences, Radding (1985) and Oesterdiekhoff (2009a, 2011, 2013a, 2014c, 2015f) regarding the history of law and politics, Oesterdiekhoff (2007, 2012a, 2013a, 2015a, d), Piaget (1959b), Bovet (1951), and Feuerbach (1985) regarding the history of religion, and Oesterdiekhoff (2000, 2006, 2011, 2013a, 2014a, b, d, e), Habermas (1976), Ziégler (1968), and Piaget (1975, vol. 10) regarding social evolution, social change, and the rise of modern, industrial civilization.

Habermas (1976), Müller (1982), Ziégler (1968) and Oesterdiekhoff (1997, 2000, 2013a, 2015a) showed that the whole discipline of sociology has to be reconstructed in terms of developmental psychology, Werner & Kaplan (1948), Hallpike (1979), Allier (1929), Blondel (1926), Jaensch (1923), Chamberlain (1907), Oesterdiekhoff (2009a, 2011, 2013a, 2015a, c, e, 2016b, d, e), Schultze (1900), and Vierkandt (1978) proved of the same regarding ethnology, Chamberlain (1907), Schultze (1900), Elias (1994), Habermas (1976), Ibarra (2007), LePan (1989), Oesterdiekhoff (1997, 2000, 2006, 2009a, 2011, 2012a, 2013a, 2015a), and Schneider (1909) regarding history, and Feuerbach (1985), Bovet (1951), Piaget (1959b), and Oesterdiekhoff (2015a, 2007, 2011, 2017) regarding religious studies. These studies have already shown that the new theory is more elaborated than any others and that a thorough understanding of the history of humankind is only possible against this new theory.

The transformation of developmental psychology to historical anthropology or historical psychology was mainly conducted by Romanes (1888), Schultze (1900), Werner (1948), Piaget (1959a, b), Hallpike (1979), and Oesterdiekhoff (2009a, 2011, 2013a, 2012c, 2013b, 2016c, d, f). This is the reference point to that each human discipline has to refer to.

The structural-genetic theory programme is central to every human discipline because it delivers a new and thorough theory of the human being to all of them. Therefore, this new theory contributes to the human disciplines that breakthrough evolutionary theory brought to biology and relativity theory and quantum mechanics to physics. It erects higher scaffolds of theory building across the humanities and social sciences than any predeceasing approaches ever before. The structural-genetic theory programme is not a new theory addable to theories such as system theory, rational choice theory or behaviorism. It is the first truly fundamental theory in the history of the humanities and social sciences ever.

2. Discussion

Developmental and cross-cultural psychology

Jean Piaget, the most influential developmental psychologist, discriminated four stages of human development, unfolding from birth over childhood and adolescence to adulthood. The sensorymotor stage characterizes the psyche of the speechless infant, the preoperational stage describes the mind of the child from two to six years roughly, with his or her's achievement of language and ideas, anticipations and memory, the concrete operational stage earmarks the middle and later childhood between six and twelve, with logical co-ordinations of objects and further achievements, and the adolescent stage of formal operations describes the evolution of self-

reflexivity, hypothetico-deductive, combinatorial, theoretical, systematic abilities, and of humanitarian, political, and social ideals or corresponding forms of engagement, all stepwise unfolding between the tenth and twentieth year of life or even up to the 25th year of age (Piaget & Inhelder 1969, 1958).

Every of the four stages implies a transformation of the whole system of psyche and personality, of nature and structure of the human being. A speechless infant is a different type of human being than a child aged seven, an adolescent aged 13 differs widely from the younger child, while an adult aged 30 manifests a different type of human being as a teenager does. They diverge not only regarding their amount of skills, knowledge, and life experience; they rather differ regarding their fundamentals of reason, mind, psyche, and personality. They differ regarding their anthropological summit and their distance from the stage of mammals and apes. There is not one psychological phenomenon, perception, idea, emotion, and reason that is not affected by the transformations coming from the psychological stages. There is no common group of psychological phenomena identifiable below the line where the stages arise. Conversely, every psychological phenomenon goes through the four stages, being modified according to the main patterns of each stage structure. A human being staying on the sensorymotor stage understands both himself and the world completely different as the humans staying on the other stages do. A human being staying on the fourth stage has a different understanding of logic, physics, nature, social affairs, law, religion, morals, etc. as a human being staying on the preoperational stage. There is not one point-to-point correspondence regarding any manifestation of mind and behavior between humans staying on different stages (Oesterdiekhoff 2016f).

It is apparent that the four stages are only main stages, that is, human development is much more divided than in the four main stages only. It is possible to say that every year between birth and 25 is or can be a full developmental year, bringing, when used, the human being to a new and higher stage. It would be even possible to describe more than one stage unfolding within a single year. While the structures of children aged seven are clearly identifiable in terms of development, it is more difficult to describe the developmental differences between adults in modern societies due to divergent areas of stronger or lesser development. As I will describe below, these difficulties do not arise regarding premodern adults who are more easily to define, like children are.

The main factor behind human development is brain development. The nervous system needs roughly 20 or 25 years to evolve. There are links between the amount of ontogenetic brain development and the development of the four stages. However, this does not imply that the human development unfolds automatically. Piaget himself saw four factors accountable causing human development (brain, equilibrium, education, physical environment), that is, without sufficient stimulation the brain does not develop in a way according to it all higher stages are being attained. Accordingly, forces and stimuli from certain environments are necessary to arouse developments of the brain, thus causing the higher psychological stages to arise (Piaget & Inhelder 1969; Werner 1948; Bühler 1930; Flavell 1977; Oesterdiekhoff 2015g).

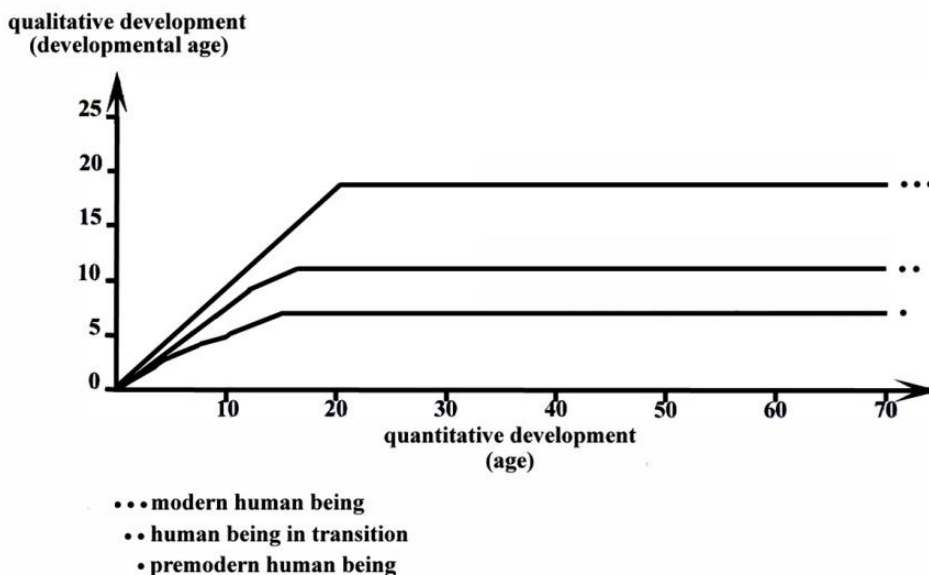
The social environments of archaic societies with their features such as illiteracy, face to face communication, hunting and farming, village residency, etc. do not stimulate and force human brain and psyche to an amount comparable to conditions of modern societies with their characteristics such as schooling, difficult jobs, mass media, anonymous mass society, cross-cultural contacts, etc. Accordingly, Piagetian cross-cultural psychology (PCCP) found out that humans in premodern societies do not develop the adolescent stage of formal operations. They usually stay on the preoperational or concrete operational stages or on mixtures of both. From 1932 up to now researchers conducted more than 1.000 empirical studies across hundreds milieus and cultures right across the five continents. They found that every adult in hunter and gatherer societies, in nomadic bands and in peasant societies, in traditional and archaic structures, and in the weaker milieus in developing nations do not develop the adolescent stage of formal operations. It was found that this deficiency concerns the whole range of world understanding and mind, including logic, physics, social affairs, morals, law, politics, and religion (Dasen 1974a, 1977a; Greenfield 1966; Freitag 1983; Hallpike 1979; Kearney et al. 1973; Kälble 1997; Kelly 1971, 1977; Laurendeau-Bendavid 1977; Luria 1982; Maistriaux 1955; Mogdil & Mogdil 1976, vol. 8; Nurcombe 1973; Oesterdiekhoff 1997, 2006, 2009a, 2011, 2012a, 2013a, b, 2015a, b, 2016f; Peluffo 1962, 1967; Ponzio 1966; Prince 1968; Tulviste 1979; Waddell 1968; Were 1968).

Henceforth, the commonalities between children aged 5-12 and premodern adults concern the whole range of mind and world understanding, down to the smallest details such as the understanding of causality, chance, numbers, waters, mountains, and wind. Thus, developmental psychology practically has no means to describe differences between children and premodern adults (Oesterdiekhoff 2016f). However, premodern adults stay on psychological stages of children over years or some decades, while a child aged 8 has this age for only one year. Therefore, premodern adults have more life experience, skills, and knowledge. Both groups share their qualitative development but differ in their quantitative development (Hallpike 1979; Oesterdiekhoff 2009a, 2011, 2013a). However, the relevance of the qualitative development overrides that of the quantitative development regarding the impact on mind and behavior.

Premodern and modern humans start their lives with the sensorymotor and preoperational stages but then there appears an asymptotic curve between them. While premodern humans stop within their preoperational or concrete operational stage, modern humans develop the concrete operational stage thoroughly and the formal operational stage at least on substage A level (50-60 % of modern people) or even on substage B level (40-50 %) (Schröder 1989; Schröder & Edelstein 2001; Mogdil & Mogdil 1976, vol. 8). While developmental ages of premodern humans are those of children aged 5-12, respectively, those of modern people are those of humans aged 10-25, respectively. Modern humans stay therefore on anthropological stages 5, 10, and more years higher than those of premodern humans.

The fact that premodern humans do not develop beyond certain summits is called “arrested development” (Werner 1948; Allier 1929; Langer 1988; Maistriaux 1955; Oesterdiekhoff 2013a, 2012c, 2013b, 2015g, 2016c, f; Ponzo 1966; Porteus 1937). Of course, arrested developments always occur, likewise in modern societies. Every adult that does not reach the highest stages possible, e.g., those modern adults that do not proceed beyond substage A, likewise experience an arrested development. However, premodern humans who usually do not proceed in their later lifetime are much more astonishing examples of arrested development. The whole psychological and ethnographic literature evidences that premodern adults do not develop the formal operational stage even when they are 30, 40, 50, 60 or 70 years old. Correspondingly, the whole research literature does not give examples that among archaic societies some individuals or groups of individuals manifest later in their lives examples of the higher stages. They never surmount animism, magic, conceptual realism, etc., or develop ideas and theories, which manifest the fourth stage of human development, later in their life time. On the whole, the phenomenon of arrested development really has a definite and nearly total character (Oesterdiekhoff 2016f, 2011, 2009a, 2013a; Lévy-Bruhl 1923, 1985).

developmental age and developmental stage



The theory of the “developmental window” is decisive to explain the divergent developmental curves of premodern and modern humans as well. There are critical phases where certain stimuli must impact brain and psyche in order to arouse further developments. In case these stimuli do not appear, come too late or too weak then brain and psyche cannot advance but remain staying on the respective stage. This phenomenon is known in PCCP and other domains as language learning as well (deLemos 1973; Werner 1948; Everett 2008; Murphy 1927; Oesterdiekhoff 2013a, b; Scott et al. 1951). Brains and psyches of modern humans are influenced from birth onwards by forces and stimuli originating in modern culture and socialisation. Kindergarten, primary and secondary school socialisation, job experiences, media influences, civilized parental education, etc., affect brains and psyches. Therefore, modern humans need at least 10 years of modern socialisation influences until they are ready to establish the first traces of the fourth stage of human development. In case the further stimuli mentioned continue in affecting modern humans will evolve developmental stages of the higher type. Conversely, premodern humans who grow up in illiterate face to face communities, without modern socialisation techniques, cannot use the consequential developmental windows in order to develop beyond the lower stages. Therefore, their development stops at stages of children aged 5-10, respectively.

It was also shown that the evolution of formal operations in modern, industrial nations increasingly continued during the whole 20th century, stepwise from generation to generation, in consequence of extension and improvement of school education and job enrichments (Flynn 2007; Oesterdiekhoff 2013a, 2014a, d, e, 2016a, f; Pinker 2011; Raven & Raven 1993). This explains also why people from the more educated classes and milieus in developing and threshold countries are more and more able to develop likewise the formal operational stage. Nonetheless the present-day difference between developed and developing nations also concerns the psychological development and it is by no means confined to economic, social, and technological dimensions. Conversely, the institutional and economic differences mainly originate in the psychological differences as it will become more clear below.

Psychological development traces back thousands of years. Today, tribes still exist that reflect the early humankind, clearly staying on childish psychological stages lower than the Greeks at the time of Homer or the ancient Egyptians. As I will show below the first groundbreaking evolution of the formal operational stage took place among scientists of the 17th century in Europe, apart of a few exceptions in Hellenistic times, confined to a few persons and areas of thinking there. From the new scientists the formal operational stage conquered wider circles of persons and milieus in Europe during the 18th and 19th centuries, becoming a mass phenomenon not before the 20th century there (Piaget & Garcia 1989; Piaget 1975, vol. 8-10; Oesterdiekhoff 2009a, 2011, 2013a; Flynn 2007).

Considering that there are 17 or 25 small stages distinguishable then one can imagine that every generation of the past 400 years – perhaps 12 generations more or less – only gained one developmental year more, as their mean developmental stage, in comparison to the previous generation respectively. Provided that the average European stood on an anthropological stage of a child aged 8 around 1600, and now at an anthropological stage of an adolescent aged 17, then each generation climbed higher only one developmental year roughly. This implies that the humankind never made great jumps regarding developmental advancements. Correspondingly, the childish psychological manifestations such as magic and animism have been declining continuously for millennia, especially after 1600, a development that ended in Western Europe not before 1950 roughly (Frazer 1932, 1994; Wuttke 1860; Oesterdiekhoff 2011, 2013a). These two examples perfectly evidence the slow but despite continuous development of the humankind and that the designated developmental ages of the Europeans really match historical data.

It will be shown that the premodern humankind in Asia, including Japan, China, and India, in Africa, in America, and in ancient and medieval Europe stood on preoperational or concrete operational stages, that is, on childish psychological stages. Although it is not possible to conduct empirical research with humans perished all the data we have from them completely match to the characteristics of the lower stages and do not fit the higher stages. Moreover, the fact that the Western nations 100 years ago stood only at the border concrete/operational stage, matches to the data according to them the ancient Romans or Chinese stood not on the formal operational stage. The Western peoples 100 years ago were more educated and civilized than any premodern people

and civilization had been (Oesterdiekhoff 1997, 2000, 2009a, 2011, 2013a). The next chapters will evidence these conclusions.

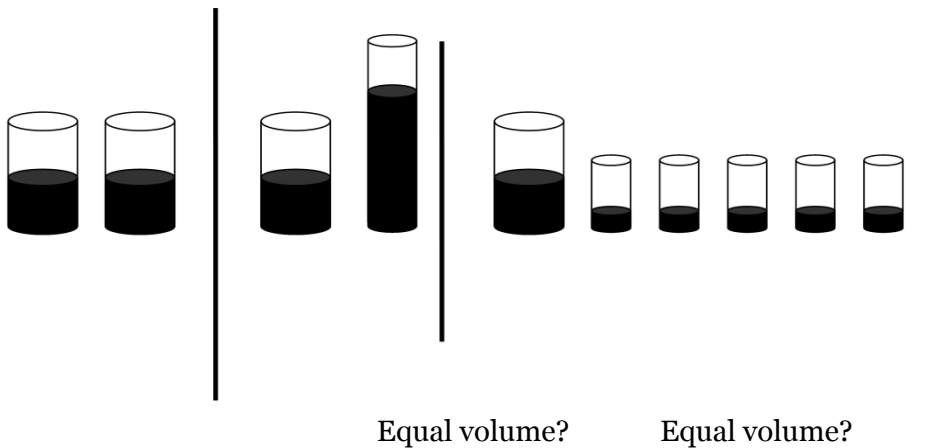
Table 1. Developmental ages of different types of human beings

25					
24					
23					
22					
21					
20					
19					
18	18				
17	17				
16	16				
15	15				
14	14	14			
13	13	13			
12	12	12			
11	11	11			
10	10	10	10		
9	9	9	9		
8	8	8	8		
7	7	7	7	7	
6	6	6	6	6	
5	5	5	5	5	5
4	4	4	4	4	4
3	3	3	3	3	3
2	2	2	2	2	2
1	1	1	1	1	1
Modern human being on a very high stage	Modern human being (Substage B of formal operations)	Modern human being (Substage A of formal operations)	Human being in transitional phases to modernity	Premodern human being	Archaic human being of nature peoples

The evolution of mind and worldview

Humans who do not stay on the concrete operational stage are not able to conserve number, length, time, space, volume, quantity and further physical entities against their visible modifications. The most used test in PCCP has been the test regarding the conservation of volume, showing that greater percentages of premodern people are not able to understand that the volume remains the same when the same amount of liquid is poured into bottles of different shapes. Preoperational children and adults do not recognize the beginning and the result of the action simultaneously (reversibility), they do not consider the mutual correspondence of the dimensions height, depth, and width, and focus only the most impressive dimension, usually the height of the glass or bottle. The link of this non-conservation of volume to magic is obvious. Their limited attentiveness and their concentration on only one aspect of the phenomenon characterize their mind across their whole world understanding (DeLemos 1973; Dasen 1974a, b; Greenfield 1966; Laurendeau-Bendavid 1977; Mogdil & Mogdil 1976, vol. 8; Peluffo 1962; Piaget & Inhelder 1941; Waddell 1968; Kutzner 2008).

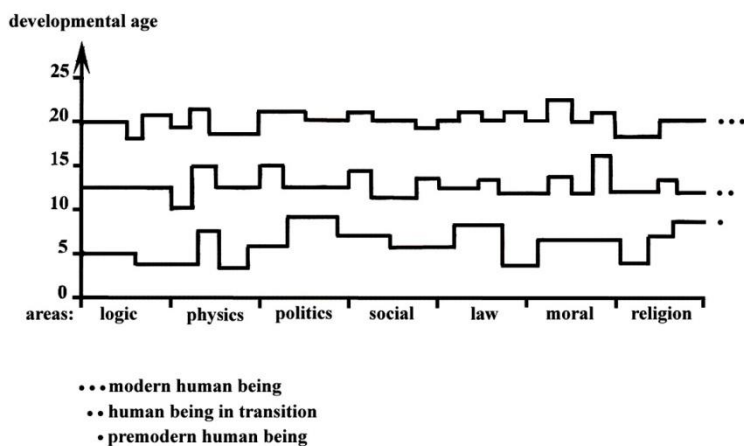
Measurement of the concrete operational stage. The conservation of volume.



Children on the preoperational stage cannot add and subtract, let alone multiply or divide numbers. Originally, they cannot even count. Their learning of numbers starts with counting 1, 2, and 3 by the use of their fingers. Later they learn to add and subtract likewise by the use of fingers. Additions and subtractions by using their head only is a later step, followed by multiplications or divisions, both possible only on the concrete operational stage (Piaget 1975, vol. 4).

Still today there are tribes who cannot learn to count 1, 2, 3 and who have no numbers at all. Only the children of the Pirãha in Brazil can learn it while the adults of that tribe cannot learn it, even after months of daily schooling they do not succeed. Adult Pirãha never learn to add $1+1=2$ or to understand the existence of numbers 1, 2 and 3. Obviously, they stay so low on the preoperational stage that stimuli later in life cannot take them to some higher developmental stages; a clear case of a closed developmental window and arrested development (Everett 2008; Oesterdiekhoff 2013a, pp. 99-114, 2011, pp. 76-86). More advanced tribes can count or add by using their hands. While the fingers of the one hand touch the objects, those of the other count them. Even in some societies with markets people often can exchange goods only when they sell their products only piece by piece because they cannot add properly. These characteristics concern greater percentages of the premodern humankind, thus proving of their preoperational stage position and their lack of any forms of abstractions (Lévy-Bruhl 1985; Luria & Vygotski 1992; Ponzo 1966; Romanes 1888; Schultze 1900; Chamberlain 1907; Etuk 1967; Cole & Gay 1967; Steinen 1894; Tylor 1871; Oesterdiekhoff, 2011, pp. 76-86).

structures d'ensemble and specific areas (possible developmental stages)



Greater percentages of premodern peoples do not master syllogisms or other hypothetico-deductive conclusions. They don't understand syllogisms such as "All bears in Russia are brown.

Moscow is a city in Russia. Which color bears do have living in Moscow?” (Modern) children by their ninth year roughly and premodern adults do not understand the logic of the question because they don’t combine the sentences logically, they don’t understand the meaning of quantifiers such as “all” and “any”, and because their mind has not the abstract competence required. Syllogisms of the easy type mentioned express developmental stages at the border concrete/formal operational stage, that is, of children aged 9 or 10. About 80% of people in Third-World ethnicities living in their traditional societies do not master these elementary tools of logical conclusions. Therefore, it is obviously that 10.000 years ago, practically nobody could master that syllogism, and 2.000 years ago, probably only 1% or 2% of the world population. People that do not master such hypothetico-deductive conclusions are not able to handle difficult theoretical problems or to understand any theories. Modern people staying on substage B of formal operations have theoretical and logical capacities that are much more developed than those people have who have just attained the ability to apply syllogisms. If we only knew from premodern peoples their failure regarding syllogisms this would be enough to evidence that their developmental age must be lower than ten years of age (Piaget 1959a; Luria 1982; Kutzner 2008; Schröder & Edelstein 2001; Tulviste 1979; Hallpike 1979; Cole & Scribner 1974; Cole et al. 1971; Henle 1962; Oesterdiekhoff 2009a, 2011, 2013a, 2012a, 2016j).

(Modern) children and premodern people share the same categories of causality, chance, probability, necessity, and possibility. These categories are not innate but develop according to the four stages. Causality and chance emerge to an extent remarkable with the rise of the concrete stage, when children grasp for the first time that two independent rows of incidents can cause occurrences not intended, thus producing what one calls “chance”. Beforehand the child believes in mystical and magical intentions, in that what Piaget named precausality, a confusion of physics, morals, and intentions. Research described that premodern peoples around the world usually do not reach the concrete operational stage regarding the understanding of those categories. They do not gain a proper understanding of causality and chance, as generations of historians and ethnographers have described. What formal operational people explain in terms of causality premodern people interpret in terms of mystical influences. There is a clear link between the belief in magic and witchcraft on the one side and the underdeveloped status of the categories mentioned in the premodern world on the other side. A deep understanding of the categories probability, necessity, and possibility only emerges on the formal operational stage, that is, during the 17th century among Western scientists for the first time in history (Piaget & Inhelder 1975; Piaget 1969; Evans-Pritchard 1976; Fortune 1963; Hallpike 1979; Kälble 1997; Lévy-Bruhl 1923, 1931, 1938, 1985; Nurcombe 1973; Oesterdiekhoff 2009a, 2011, 2012a, 2013a, 2016b, e, j, with Rindermann 2007; Peluffo 1962).

Modern children by their tenth year at the latest manifest animistic tendencies, not discriminating between psyche and physis, soul and matter, subject and object, biology and physics. The younger they are the stronger is their tendency to regard dead matter as animate and conscious. Initially they see cars, houses, woods, waters, mountains, rocks, artefacts, lamps, and doors as animated and living, in later years only moving objects such as clouds, trees, winds, waters, cars, etc. With ten years and the rise of the formal operational stage, animism and personification vanish in favor of the evolution of the empirical-causal categories and the mechanical worldview. Humans during the second decade of life discriminate matter and soul, things and ideas, biology and physics, knowing that the biggest part of the world consists of dead matter and is not governed by a soul (Ellwanger 1980; Piaget 1959b, 1969; Bühler 1930; Stern 1924; Werner 1948).

Sciences for more than 200 years have described that every premodern people across the continents and times share the same animistic tendencies as children do. They ascribe soul and life to rocks, mountains, wind, waters, lightning, woods, weapons, clothes, houses, etc. They personify natural objects, fear their control and revenge, adore them as divinities, and offer them sacrifices and expect their help. Nature religion, the adoration of wind, waters, woods, and stars, was omnipresent in the whole premodern world, even in the Jewish-Christian traditions by the eve of Enlightenment, although those were the only world religions, which objected against nature religion. Nature religion was a core element of religion in China, Japan, India, and the Greek-Roman religion. Nature religion reflects the psychology of peoples staying on children’s psychological stages, it reflects children’s animism (DeGroot 1910; Fortune 1963; Frazer 1932,

1977, 1994; Havighurst & Neugarten 1955; Jahoda 1958a, b; Jensen 1992; Le Roy 1911; Lévy-Bruhl 1971; Mbiti 1970; Oesterdiekhoff 2009a, 2011, 2013a; Schultze 1900; Tylor 1871; Wuttke 1860).

Children of the first decade of life automatically believe in ghosts, monsters, fairies, and witches, no matter in which socialisation contexts they grow up. The younger they are the more they believe in these creatures. The primitive psyche, with its interference of emotions, perceptions, and eidetism, accounts to that phenomenon, making the phenomenon as inevitable to the lower psychological stages. Modern adolescents surmount these forms of belief due to the rise of the fourth stage of human development (Blair et al. 1986; Bühler 1930; Bühler & Bilz 1977; Ellwanger 1980; Goldman 1964; Harris et al. 1991; Hyde 1990; Prentice et al. 1978; Thun 1959; Zeininger 1929).

Sciences of the last centuries described that the whole premodern humankind shared these forms of belief. The belief in ghosts and spectres is a main part of premodern religion, next to natural religion, and being connected to it. There is not one premodern society to find where such beliefs did not belong to the centre of culture and society (DeGroot 1910; Evans-Pritchard 1976; Everett 2008; Fortune 1963; Frazer 1932, 1977, 1994; Jensen 1992; LeRoy 1911; Mbiti 1970; Müller 2004; Signer 2004).

Children do not discriminate psyche, mind, and reason of humans and animals. They rather believe that animals have the same amount of mind and reason as humans have and that animals know about that what humans do. With ten years roughly children start discriminating the several stages of reason and intelligence that separate lower animals such as insects from higher animals such as mammals, and those again from humans (Bettelheim 1997; Bühler & Bilz 1977; Prentice et al. 1978).

The whole premodern humankind believed in the human mind and intelligence of animals, in their knowledge about that what happened in human settlements and what humans planned to do, and in their commitment in human activities. Savage peoples exerted blood revenge against predators as if they were criminals. Animals such as insects, snakes, horses, birds or dogs were accused of having committed crimes before courtyards, with judges, witnesses, and lawyers involved. These trials did not differ from those against human delinquents. Animals convicted were imprisoned, punished, or executed before audience. These trials against animals were conducted right across the continents and times, by the eve of Enlightenment in Europe. It was provided that animals had a free will, a moral responsibility and culpability, and a social and religious engagement in human society. If we only knew from ancient people this phenomenon it would suffice to evidence its childlike psyche beyond the slightest doubt (Evans 1906; Fischer 2005; Frazer 1977, 1994; Oesterdiekhoff 2009c, 2013a, 2011; Steinen 1894).

Moreover, premodern humankind adored animals as gods or as magicians. Adoration of animals as gods belongs to the Hindu religion by today, and was dominant in ancient Egypt. In the form of totemism it was an universal phenomenon right across the whole premodern world (Evans-Pritchard 1976; Frazer 1977, 1994, 1932; Oesterdiekhoff 2015e, 2016b; Schneider 1909; Schultze 1900; Steinen 1894).

The younger the children are they more they believe in magic. Children aged 3 believe stronger in magic than children aged 5. The decline of magic becomes stronger with the rise of the stage of concrete operations; the phenomenon practically vanishes with the emergence of the stage of formal operations and the start of the second decade of life. Child's psyche and magic are two parts of the same medal. Every phenomenon that contributes to the psyche of child also accounts to magic, including wishful thinking, animism, weak sense for reality, non-development of the causality category, etc. (Ellwanger 1980; Goldman 1964; Hyde 1990; Piaget 1959b, 1969; Thun 1959; Werner 1948; Subbotsky 2011; Zeininger 1929).

The whole premodern humankind practised magic in order to secure or improve their lives. Magical rites were performed in order to cause rain, sunshine, birth, food, love success, etc. Magicians and sorcerers were omnipresent in society (Evans-Pritchard 1976; Fortune 1963; Frazer 1977; Luck 1990; Mair 1969; Müller 2004; Oesterdiekhoff & Rindermann 2007; Signer 2004; Thomas 1980; Thorndike 1923-1946; Vierkandt 1978).

Magic was conducted in order to damage hostile persons by sickness or death. For example, right across the continents, including premodern Europe, it was believed that every natural death, caused by sickness or aging, was made by magic. Therefore, people searched for the alleged murderer, by using oracles or by mere suspicions, and accused him of having killed the person who

actually died for sickness, accident or old age. Frequently or mostly the accused person was killed although having nothing to do with the death. It is said that this magical belief has cost more lives than wars in the whole history of mankind and has decreased the growth of world population to an enormous extent over millennia (Evans-Pritchard 1976; Fortune 1963; Frazer 1977, 1932, 1994; Lehner 1911; Lévy-Bruhl 1923, 1931, 1938; Mair 1969; Oesterdiekhoff 2011, 2013a, pp. 183-193, 2016e, Wuttke 1860).

The belief in witches and sorcerers is part of the belief in magic. There is not one premodern society without the belief in witches, including nature peoples in Black Australia or Indian America or ancient civilizations such as China, Japan, India, and Persia. Children inevitably believe in witches, too, even when raised in atheistic households. Therefore, it is evident that the universality of the belief in witches in premodern societies originates in the universality of the primitive, childish psyche there. Consequently, the disappearance of the belief in witchcraft in Europe from 1690 onwards (the Dutchman Bekker is said to be the first European who did not believe anymore in witches) solely roots in psychological advancements (Baschwitz 1963; Evans-Pritchard 1976; Mair 1969; Müller 2004; Jensen 1992; Oesterdiekhoff 2013a, pp. 203-205; Signer 2004; Soldan & Heppe 1986).

Magical rites were performed in the frame of religious beliefs, in order to sustain the seasons of the year, sun course and rebirth of the cosmos. Magic and religion weren't separable from each other. The first civilization that surmounted magical beliefs was the Western civilization since the era of Enlightenment. Of course, the decrease of the belief in magic started already in antiquity when humankind surmounted anthropological stages of children aged four or five. A next stage was won in Europe after 1200, when judicial ordeals and magical rites became under pressure. The next step came with the era of Enlightenment and the rise of sciences during the 17th and 18th centuries. The last traces of magic, worth mentioning, disappeared in Europe during the first half of the 20th century. The developing countries have been running through this transformation, too, with a time lag expectable (Oesterdiekhoff 2011, 2009a, 2013a, 2012a).

(Modern) children by their sixth year believe in the metamorphosis of any kind into any other, caused by magic. Experiments show that cats equipped with dog masks on their head appear to younger children, who even played with the cats before they were dressed, as dogs now. The children expected their barking and were in fear of them. Children aged seven or eight, however, understood that the new costume did not change the nature of the cats. The understanding of the unchangeability of any kind despite external modifications is a part of the concrete operations, linked to the conservation of quantity, number, length, and mass (DeVries 1969; Flavell 1977; Ellwanger 1980; Keil 1986).

The preoperational stage accounts to children's and premodern man's ideas regarding spectres, objects' appearance from nothing (like fairies do), double existence of an individual at distant places, and metamorphosis from any kind to any other. The whole premodern world believed in the possibility that rocks, trees, artefacts, animals, humans, and gods can change their whole nature. It was believed that humans can transform to rocks or trees, spectres or animals. It was believed that magicians have the power to transform a piece of wood in a house, or a bear into a man, or a puppet into a person. The belief in metamorphosis belonged to the centre of ancient magic and religion, superstition and worldview. It ended in Europe not before the end of the 19th century, in other parts of the world it is observable until now (Frazer 1994; Lévy-Bruhl 1971, 1983; Luck 1990; Müller 2004; Oesterdiekhoff 2013a; Steinen 1894; Signer 2004; Wuttke 1860).

Human development, culture, and history

Sensorymotor stage 0-2 years of age	Mammal societies	Speechless intelligence
Preoperational stage 2-6 or 8 years	Premodern societies, especially nature peoples	Conceptual or nominal realism Magical beliefs and practices Belief in metamorphosis Non-conservation of physical entities such as length,

		<p>volume, number, etc. Animism, personification of objects Belief in ghosts, witches, etc. Belief in myths and legends Strong religiousness Belief in immanent justice and adherence to objective responsibility Support of severe forms of punishment Authoritarian forms of social relations Egocentrism of mind and behavior Kohlbergian moral stage 1</p>
<p>Concrete operational stage 6-12 years</p>	<p>Premodern societies, including the educated classes of the ancient and medieval civilizations, and some milieus in early modern societies</p>	<p>No understanding of syllogisms and logical deductions First logical classifications Decrease but no annihilation of the preoperational characteristics mentioned Strong religiousness Kohlbergian moral stage 2</p>
<p>Formal operational stage Substage A 10-15 years</p>	<p>Modern societies</p>	<p>Disappearance of the phenomena of the two earlier stages mentioned Development of self-reflexivity, of combinatorial, systematic, experimental abilities, and of hypothetico-deductive conclusions Replacement of the magical-animistic by empirical-causal categories Disenchantment of worldview Decline of religion and rise of agnosticism Enlightenment and emergence of humanism, rise of the humane forms of punishment Rise of democracy and civil society Kohlbergian moral stages 3 and 4</p>
<p>Formal operational stage Substage B 15-25 years</p>	<p>Some percentages of people in the currently most advanced nations</p>	<p>Abilities to understand theories Democracy, civil society, liberty rights develop higher Humanism and pacifism are strongly supported Breakthrough of agnosticism</p>

		and atheism Kohlbergian moral stage 5 (and 6)
--	--	---

The evolution of religion

As any other psychological phenomenon, religion is exposed to psychological stage developments, too. It is useful to divide religion in its main parts in order to make a comprehensive analysis possible. Religions consist of these central issues: Belief in divinities, in legends and myths that tell about nature and life of the gods, in divine creation and maintenance of cosmos and world, in divine governance over world and humans, in divine punishments over humans on earth and in afterlife, and in a life after death, usually or frequently in paradise and hell. All or most of these core elements are to find among nature peoples of every continent, including Black Australians, American Indians or Black Africans, and ancient civilizations and world religions such as Hinduism, Buddhism, Islam, Christianity, and Confucianism.

Even nature peoples such as the Black Australians or American Indians, the Pygmi or the Eskimo, likewise every ancient civilization and world religion have the belief in a central god of heaven, who created cosmos and world. This central god has the characteristics of god the father of the Jewish-Christian tradition. Next to this central god every premodern religion has a pantheon of other gods, usually ressort gods or Olympic gods, the gods of water, wind, fertility, harvest, love, war, etc. (Campbell 1960; Eliade 1974, 1976; Heiler 1969; Jensen 1992; Le Roy 1911; Mbiti 1970).

The third central group of gods are the ancestor gods, mostly the most addressed gods, those, whose adoration is more relevant than that of the others. Ancestor worship is central among nature peoples of Australia, America, Africa, among every great ancient civilization and world religion. Only in the Jewish-Christian tradition ancestor worship became oppressed, although the cult of the dead was crucial in Europe still by the epoch of Enlightenment. On the whole, the biggest percentage of the whole premodern world adored the dead fathers and mothers, and grandfathers and grandmothers, including sometimes dead uncles and aunts, as gods. Other dead persons of the family did not find the attention as those persons mentioned. Frequently on a daily basis the dead family members were addressed, adored and supplied with food and drink. The premodern humankind assumed that the dead family members governed the life of the descendants totally, as parents control small children, by causing the incidents happening in the world of the descendants such as weather, food supply, illness, death, accidents, luck, and warfare. It was believed that the ancestors stood in contact to the Olympic gods and to god the father (DeGroot 1910; Durkheim 1965; Fustel de Coulanges 1965, Frazer 1911/1922/1924; Middleton 1999; Oesterdiekhoff 2015d, 2011, 2013a; Tylor 1871).

Developmental psychology alone can explain ancestor worship. It was found that every child initially regards his parents (and adults generally) as omnipotent, omniscient, and almighty, as gods who control neighborhood and world by magic. Children initially love and adore their parents as gods. With the sixth year of life, their intelligence and sense for reality has grown to an amount where they enter their first sceptical crisis, recognizing the limited power parents, adults, and humans have regarding the control of the world. Children on the concrete operational stage surmount their earlier tendency to regard humans as gods, transferring their religious feelings now to the invisible gods of whose existence they experience now at school or from the culture where they grow up (Bovet 1951; Hyde 1990; Goldman 1964; Thun 1959; Oesterdiekhoff 2015d, 2011; Piaget 1959b).

It is the same transformation that the Mediterranean experienced when ancient people replaced their ancestor worship by the Christian god as the only god. The other world religions such as Confucianism, Buddhism, and Hinduism did not remove ancestor worship. If we only knew from ancient religions the phenomenon ancestor worship this would suffice to evidence their childish psychological stage. It is obvious that the explanation of the other forms of divinities is not much distant from that explanation. I already showed it regarding the nature divinities above.

Developmental psychology does not only explain the origin of the belief in divinities but also the origin of the legends and myths that describe their nature, their characteristics and biography. Practically the whole premodern humankind believed in divinities with certain bodily forms, certain life histories full of actions and incidents, certain character traits, certain places where they

live, etc. Usually, the Olympic or ressort gods had names and humanlike appearances, and were adored and supplied by their believers. How it is possible that the whole humankind fully believed in these myths and legends as the truest and holiest stories, defining the emotional and intellectual centre of their culture?

Developmental psychology has shown that children aged 3-8 run through a mythical phase. They believe in myths where supernatural beings magic wonderful things, where any kind of magic and metamorphosis takes place, and where any kind of wishes comes true. Children this age do not discriminate myths and reports or fantasy and reality but take this kind of fiction as true reality. Children this age are able to create such legends and myths and to believe in them. They believe in fictional and religious myths likewise. They are the truest believers in modern culture altogether. Modern children after their eight year replace their interest in myths by romans and adventure stories due to their grown intelligence and sharpened sense for reality. After their tenth year their mythological phase ends, likewise their literal and childish religion declines in favor of more abstract forms of religion (Bühler & Bilz 1977; Diekmann 1995; Hyde 1990; Oesterdiekhoff 2011, 2013a, 2015e, 2016b, i).

Numerous mythologists have described the resemblances between children's attitudes towards myth and religion and those of premodern adults. Wundt (1910, 1914), Campbell (1960) and Heiler (1969) saw no differences between children's and archaic human's mythological fantasy. They already explained religious myths in terms of children's myths. The conclusion is obvious: As long as humans stay on childish psychological stages they are capable to believe in religious myths that explain life and existence of gods literally. The more adult humans advance psychologically the more they lose the capability to adhere in religious legends and myths, weakening and diminishing their religiousness, and destroying the mythological roots of their religion.

Every religion explains the origination of cosmos and world by creation acts of divinities. Often, religions defend their existence by proofs of such kind: without divine creation the universe could not have come into existence. Developmental psychology has shown that every child initially believes that parents, adults, the first humans, and gods had made cosmos and world. This phenomenon called artificialism roots in inevitable mechanisms of children's psychology such as its stage level of causality, magic, etc. Humans on lower psychological stages cannot explain the existence of cosmos and world otherwise than by a humanlike making. What is said to be true regarding the origination of cosmos and world is also true regarding their maintainance. Children and premodern humans explain the alternation of the seasons of the year and the alternation of nights and days, the occurrences happening in the world, births and deaths, poverty and richness, the course of history and the fate of the human race in terms of divine government. Not only ancestors but also the Olympic gods and god the father control the earth by magic (Campbell 1960; Eliade 1974, 1976; Feuerbach 1985; Frazer 1932, 1977, 1994; Jensen 1992; LeRoy 1911; Oesterdiekhoff 2007, 2011, 2017).

Every world religion provides the belief in rewards and punishments humans gain on earth and in heaven. Usually, good people are rewarded by the gods by happy incidents and life success; bad people are punished by the opposite. At the end of life, the gods decide whether the dead receives eternal reward or eternal punishment, attains admission to hell or paradise. Not only the world religions, including Buddhism as a popular religion, but also some more advanced nature peoples, those who do understand the phenomenon death on a more advanced level, share beliefs in hell and paradise. Children and premodern humans understand paradise and hell as really existent places with fire and darkness regarding hell or with light, fruits, beauty, music, and the present god regarding paradise. Children on the formal operational stage lose their realistic beliefs in favor for more abstract ideas, likewise the modern humankind after the epoch of Enlightenment. It is obvious that the belief in the immortality of the soul, in the eternal existence of a person, in a life after death and in paradise roots in children's mentality, in its capability to take wishes as realities and to externalize its dreams (Anthony 1940; Bering & Bjorklund 2004; Childers & Wimmer 1971; Eliade 1974; Frazer 1932, 1911/1922/1924; Goldman 1964; Hyde 1990; Feuerbach 1985; Leuba 1916; Loomba 1970; Mbiti 1970; Oesterdiekhoff 2007, 2011, 2013a, 2017; Zeininger 1929).

The first doubts into the existence of god came along with the first doubts into the existence of witches and sorcerers. Not Lukrez and Epikur in antiquity, as sometimes maintained, but priests and philosophers in France at the end of the 17th century are said to be the first atheists in world history ever (Buckley 1990, p. 34; Baschwitz 1963). The first great atheist thinker in world history

was Baron Paul Thiery d’Holbach, who published in 1770 his “La système de la nature”, a book worth reading by today, the probably first scientific theory of religion in the history of sciences. D’Holbach and Diderot built the first source of atheism that spread through scientific circles and educated classes during the 19th century and conquered high percentages of whole nations during the 20th century. More than 90% of the members of the American Academy of Sciences and of the Royal Society of London are atheists now. Roughly half of the peoples in the currently most advanced nations are agnostics or atheists, while about 90% of people in the Third World are still believers (Oesterdiekhoff 2011, pp. 147-161, 2013a, pp. 215-240).

The decline of religion started in ancient Mediterranean with the decline of ancestor worship and nature religion (“Pan is dead”), continued with the abolishment of ordeals after 1200, and with the slow but continuous dying of Christianity during the 19th and 20th centuries. The total end of religion in the most advanced nations in the next 3 or 5 generations is now predictable.

Full and vivid religion provides the childish psychological stage. Humans progressing beyond lose more and more the firm and strong religiousness in favor for more abstract and weak religious ideas. Do the formal operations attain higher levels of the substage B and beyond then agnosticism and atheism become inevitable. Some people would now object that some scientists or intellectual authorities are still religious and it couldn’t be that pope, bishops, presidents, intellectuals, etc. are persons staying on lower stages. I hint at the fact that more than 90% of the members of the two scientific societies mentioned reject religion. This proves of the fact that higher stages automatically erase religiousness. Religiousness is not a module separable from psychological stages. The religiousness of Aristotle, Thomas Aquinas, Leibniz, Hegel, and of Schweitzer, Gandhi, and Mandela results from their psychological stages.

On the whole, developmental psychology explains all central elements of religion. It explains the whole phenomenon, the nature and substance of religion. It explains the inevitability and necessity of religion and religiousness across the whole premodern world, namely as nonseparable parts of lower psychological stages, its continuous decline during the transitional phases towards modernity and the steady rise of atheism and agnosticism. Developmental psychology explains religion, not phenomenology, evolutionary psychology, sociology, general psychology, or functionalism. The new structural-genetic theory programme delivers the first fundamental scientific theory of religion in the history of sciences that fulfills the principle of the sufficient reason (Oesterdiekhoff 2007, 2011, pp. 147-162, 2013a, pp. 215-240, 2012a, pp. 257-368, 2016b, i, 2017). The only veritable predecessor is Feuerbach (1985) with his book “The essence of Christianity”, not Freud (1975), Durkheim (1965), Dawkins (2006) or whoever.

The evolution of philosophy and sciences

There are some authors who already contributed to the reconstruction of the history of philosophy and sciences in terms of developmental psychology. Piaget and some of his followers compared psychological stage development with the history of philosophy and sciences (Piaget 1969, 1975, vol. 8-10, with Garcia 1989, with Inhelder 1958; Langer 1988; Strauss 1988; Oesterdiekhoff 2000, 2012a, 2013a, pp. 251-328, 2011, pp. 192-206, 2015a, 2016d, h; Kälble 1997).

Philosophy outgrew from the mythical phase of thinking climbing on stages describable as the archaic stage of philosophy, best presented by Ogotemeli, the philosopher of the Dogon in Mali (Griaule 1975). This kind of philosophy with its symbolism, phenomenism, animism, and conceptual realism completely stays on the preoperational stage. The Ionian philosophy, with its tendency to define one substance as origin of all phenomena, its atomism, its animism, etc., was defined by Piaget (1975, vol. 8-10) as staying on the concrete operational stage. Piaget (1975, vol. 8-10, with Garcia 1989) saw Aristotle’s physics as resembling to the physics of children staying at the border concrete / formal operational stage. Children this age and Aristotle share the same concepts and ideas regarding movements. They both believe that trees move for their own will and force, thus producing air that additionally enhances their movements. They both explain likewise the movements of waters, clouds, winds, and arrows. The arrow starts its flight due to its will and power, the surrounding air makes place, goes then intentionally behind, makes a turnaround in order to push the arrow forward. Children and Aristotelians believe that arrow and air have intentions and will and that the flight happens due to this psychology of the movers or causers. Only adolescents of the formal operational stage and scientists of the early modern epoch surmount this idea of double movement (antiperistasis) and replace this animistic-magical idea by

the mechanical theory of movement and physics. Thus, magic and animism build the foundation of ancient and medieval philosophy, born in the childish psychological stages. Only the early modern philosophy, with Galilei, Descartes, and Newton erected the formal operations in the realm of worldview and physics that characterize now the adolescent stage every modern human goes through (Piaget 1969; 1975, vol. 8-10, with Garcia 1989; Strauss 1988; Kälble 1997; Oesterdiekhoff 2000, 2012a, 2013a, pp. 251-328, 2011, pp. 192-206, 2015a, 2016d, h).

Plato's philosophy of ideas according to it ideas are realities and things are only mere appearances bases on children's conceptual realism. Children of the first decade do not discriminate words and things, believing names, words, and ideas have a true and real existence (Piaget 1959b). Plato likewise maintains that ideas be the origins of the things which only participate at them. Ideas created classes, and classes the visible phenomena, Plato says. The ideas, being eternal, make the things which may perish again. All different things came into existence by their mystical participation with the ideas; things have a shadowy and ideas have a real existence. Lévy-Bruhl (1985) found similar ideas among primitive peoples that likewise believe in mystical participations and in the non-differentiation of names and things. Only the early modern philosophy of knowledge surmounted this childish conceptual realism as modern adolescents likewise do. From Descartes onwards the critical theory of knowledge changed the relationship between subject and object, words and things (Oesterdiekhoff 2016h, 2013a, pp. 270-280, 2015b, 2000).

Plato and Aristotle defined philosophy for more than 2000 years because their disciples stood on the same psychological stage. The philosophers of the early modern epoch, however, surmounted this stage of mind and philosophy. They surmounted the childish magical-animistic worldview by the mechanical one and replaced the childish theory of mind and knowledge by the formal operational one. Philosophers such as Descartes, Leibniz and Hume established the formal operational stage. However, their philosophies still based on theological premises. With Feuerbach, Marx, and Nietzsche a further stage of philosophy was born. From now on philosophy did not rely anymore on theological premises because evolutionary ideas replaced theological ones (or artificialistic and magical ones). The philosophy of the 19th and 20th centuries destroyed the narrow frames of the early modern philosophy. Cassirer, Popper, Jaspers, Plessner, etc. manifest higher stages of philosophical mind than Descartes, Leibniz, Spinoza and Hume regarding the whole understanding of mind, physics, society, and politics.

Obviously, the history of philosophy follows the same stages developmental psychology has described regarding the human development. Mythical mind, archaic philosophy, Ionian philosophy, ancient Greece philosophy, early modern and modern philosophy exhibit clearly distinguishable stages of philosophy, corresponding to the psychological stages already described (Oesterdiekhoff 2016h, 2013a, pp. 251-286, 2015b).

The development of sciences is deeply connected to the development of philosophy described. Philosophy preceded the rise of sciences during the short hellenestic period (roughly 300 to 50 B. C.) and their rebirth after 1600 A. C. Mechanical philosophy accompanied the rise of physical sciences. Descartes and Leibniz established the mechanical worldview as Galilei and Newton did in empirical research. They all surmounted the magical-animistic and artificialistic worldview of Aristotle, replacing it by a worldview according to it the universe is a container filled with dead matter. Henceforth, they replaced Aristotle's theory of movement by the law of inertia. They separated life and matter, biology and physics, as modern adolescents do in their 13th or 15th year (Piaget & Inhelder 1958; Strauss 1988; Kälble 1997).

The replacement of animism and magic by empirical-causal categories and the mechanical view originated the physical sciences during the 17th and 18th centuries. The transformation from alchemy to chemistry, from astrology to astronomy, from Aristotelian philosophy to physics, biology, and geology, from shamanism to medicine, etc., caused the rise of the sciences "in strictu sensu". Alchemy consisted of the idea chemical elements be alive and conscious; chemistry based on the idea they are dead matter only reacting to environments. Astrology based on the idea planets and stars are gods; astronomy followed the idea they are dead matter governed by natural laws such as gravitation. Premodern biology and geology originated in the ideas of the Bible; their modern successors only trust in empirical enquiries. Shamanism relied on superstitious ideas regarding ghosts and magic; modern medicine sees sickness and health as bodily states discernible and treatable by empirical research and methods. Altogether, the premodern sciences mainly based on magic and animism, while the removal of this childish worldview by the empirical-causal

categories immediately caused the rise of the natural sciences during the 17th century (Oesterdiekhoff 2013a, pp. 287-328).

The development of sciences in the past 400 years is the most remarkable achievement of the humankind. Its root solely is the replacement of the childish anthropological stage by the adolescent anthropological stage. Some authors such as Strauss (1988) or Kälble (1997) maintain that the formal operational structures only developed in the new scientific theories and not in the minds of the scientists, believing medieval philosophers had them already, but not their theories. Piaget (1975, vol. 8-10, with Garcia 1989) also refers the evolution of the formal operational stage occasionally only to the theories, sometimes, however, to the mind of the scientists themselves. It is clear that the evolution of the formal operational stage originated in the minds and brains of the scientists themselves, making possible that they could surmount childish theories in favor for scientific theories. The evolution of the formal operational stage in the brains is the only reason to the rise of the natural sciences. On the whole, the structural-genetic theory programme explains the rise of the sciences "in strictu sensu" (Oesterdiekhoff 2000, pp. 268-281; 2013a, pp. 287-328, 2012, pp. 257-311).

The evolution of morals

Children have morals different from that adults have, as Piaget (1932) described in the probably best book ever written in the history of moral psychology. Kohlberg (1974, with Gilligan 1971) discriminated six stages of moral development. The third stage appears in the beginning of the second decade. Adult people living in traditional societies do not surmount the third stage, usually staying on the first two stages, as numerous empirical studies have demonstrated. This shows that premodern people do not surmount childish stages also regarding their moral life. People in the modern societies develop the higher stages, usually staying on the stages 4 or 5 (Kohlberg & Gilligan 1971; Hallpike 2004; Oesterdiekhoff 2016l, 2015a, 2014c, 2013a, 2012a).

It is obvious that numerous phenomena such as slavery, inferior status and maltreatment of women, cannibalism, duels, violence culture, caste system and social inequality in terms of feudalism and aristocratic structures, brutal arena games, sadistic punishment law, etc. have to be referred to the lower psychological stages and to the lower moral stage of premodern humankind. Correspondingly, the rise of humanism in the era of Enlightenment, with its criticism of the phenomena mentioned manifests the higher moral stages, e.g., the Kohlbergian stages 4 and beyond, linked to formal operational stages. Consequently, modern society surmounted the primitive moral phenomena mentioned and established higher moral and social structures in society, politics, gender relations, child care, minority protection, punishment law, and conflict solutions (Porter 2000; Schultze 1900; Darwin 1998; Oesterdiekhoff 2000, 2012a; Hallpike 2004).

Cannibalism is the best example of the low morals of primitive societies. Cannibalism traces back to *Homo erectus* and to the prehistory of *Homo sapiens*, it is found among nature peoples across the continents and times, and ends in Africa, America, Oceania, and Australia only during the colonial era. Its last traces in Eurasia usually are to find in antiquity. Neither religion nor food shortage are the main motives for cannibalism but the simple lust for human flesh. Cannibals eat not only foreign people but also their own living neighbors or their own young and living family members, just for fun and for having a meal. The reports do not show any compunction, shame or guilt feelings but instead their total lack. It is evident that only primitive people staying on lowest psychological and moral stages are capable to live the life as cannibals. Correspondingly, psychoanalysis (Freud, Balint, Fraiberg, Klein, etc.) showed that the psyche of the small child is full of cannibal fantasies, too. Psychological stage development alone created the civilized man who cannot even share and understand the motives that once activated the psyche of cannibals (Darwin 1998; Volhard 1939; Oesterdiekhoff 2012a, 2013a, 2015a, b, 2016a, l).

The most violent humans are children aged two or three. Children this age are more violent than teenagers are; they again tend more to bodily and verbal aggressions than adults. Adult humans staying on childish psychological stages are therefore more aggressive and violent than civilized adults are (Oesterdiekhoff 2012a, 2013a, 2015a, b, 2016a, l; Pinker 2011; Elias 1994; Chamberlain 1907; Schultze 1900). This explains main parts of the history of violence.

A third of people living in premodern societies died from homicide, a percentage to find in nature peoples and ancient civilizations alike. Deadly duels between members of the same clan or tribe on the one side and between members of different clans and tribes on the other side belonged

to the usual manners across the whole premodern world, including nature peoples and ancient civilizations. Insults, revenge feelings, jealousy, and envy were the normal motives that caused duels and combats every adult human being had to expect as possible or probable occurrences happening in his life. Warfare in tribal and state societies had their share in reaching this high percentage of deaths. Tribal societies usually stay in never-ending wars; they commonly do not know peacetime for a longer period. The same is held for ancient or medieval civilizations that mostly spend their times leading wars. Wars are led against nations, tribes, and cities. Cities fight against each other; and parts of cities against other parts of the same city, as it still happened in Iraq during the first half of the 20th century (Keegan 1996; Keeley 1996; Oesterdiekhoff 2016a, g, 2015a; Elias 1994; Pinker 2011).

Premodern punishment law of nature peoples and ancient civilizations right across continents and times consists of cruel forms of humiliation and execution, including burning, crucifixion, boiling and tearing to pieces. Its abolishment took place for the first time in history in Europe after 1700, in consequence of the era of Enlightenment. The modern period also abolished the maltreatment of animals. The first laws against maltreatment of animals were enacted in Europe during the first half of the 19th century. Nature peoples and ancient civilizations, however, maltreated animals in a way hardly imaginable at today (Schultze 1900; Porter 2000; Pinker 2011). Remnants of that behavior are now observable in the developing nations, including Asia.

The Roman arena games consist of these elements just described: maltreatment of animals in deadly chases and combats, duels in form of gladiator fights, and mass execution of delinquents. As I just showed these three elements belong to the common manners right across the whole premodern world, including nature peoples and Asian civilizations. The exceptionality of the Roman games only refers to their splendid frame but not to the elements they consist of. Therefore, the psychological analysis of the Roman games is transferable and generalizable to nature peoples and ancient civilizations as well. The psychology and morals of the Romans reflect those of the premodern humankind insofar as every premodern society practised a brutal punishment law, deadly duels, and cruel treatment of animals.

The games usually started in the mornings with fights between animals or between animals and humans and continued by the liquidation of delinquents. The convicted criminals were forced to kill each other until the arena was filled with corpses or they were burnt, decapitated, or crucified. During the afternoon gladiators fought against each other, frequently dying in dependence of the decision of audience, emperor or slaveholder. The games stood in the centre of the entertainment culture of the Roman Empire, visited by the elite of the state and the whole people. There was no political party or social movement intending to abolish these cruelties. Thus, they reflect the moral and psychological stage of ancient (and premodern) society (Oesterdiekhoff 2009b, 2012a, 2016a, 2013a, 2011; Darwin 1998).

It would be impossible to reestablish the Roman arena games in modern societies, even not in Third-World-nations of today. There are no conditions thinkable that would make possible to install the games in any modern city with 50.000 bystanders and TV casting. It would be a psychological, not a physical impossibility. This evidences that the modern humankind stays on much higher psychological and moral stages than the whole premodern humankind. Thus, the structural-genetic theory programme, not the traditional social sciences, are capable to explain the historical character of the Roman society respectively of the vanished culture and psyche of the premodern society.

The same is true regarding the other phenomena of premodern society such as slavery and maltreatment of women. Slavery is a phenomenon to find among nature peoples in America, Africa, Asia and Australia, and in every ancient and medieval civilization. It was abolished for the first time in history during the era of Enlightenment in Europe and then, consequently, in the whole Western world during the 19th century. From this source the abolishment of slavery started a worldwide triumph, although not having accomplished a total victory by today.

It was usual to capture or to buy a person, to use him or her for any goals, and to sell or to damage him or her without any protection of official institutions. Neither philosophy nor religion objected versus these practices which were accepted and supported by the whole people. Only primitive and uncivilized people behave that way. Modern, civilized peoples completely reject the culture of slavery (Porter 2000; Darwin 1998; Oesterdiekhoff 2015a, 2014d, e, 2013a; Pinker 2011).

The maltreatment of women in the premodern world is part of its primitivity. Women were bought and sold, forced to marriages, beaten and maltreated. It was custom among several nature peoples to kill them when they reached the age of thirty. Only modern society from the era of Enlightenment onwards started the process called emancipation of women, a continuous advancement, with remarkable success during the past few generations.

On the whole, only the structural-genetic theory programme is capable to explain the evolution of morals and manners, not traditional social sciences with their scanty theories and methods.

The evolution of law

Developmental psychology delivers the key to disclose the history of law. Already Piaget (1932) himself recognized the resemblances between the history of law and psychological stage development. The resemblances mainly concern punishment law, judicial procedures (ordeals), (objective or subjective) responsibility, trials against animals, and the fundamental understanding of legislation – laws as made either by god (theocracy) or people (democracy).

I start with the history of punishment law already mentioned. Piaget (1932), Bühler (1930), Stern (1924), Chamberlain (1907) and Tapp & Kohlberg (1971) described that children even in liberal households support severe punishments even for modest failures. Children are cruel because they don't sufficiently understand the psychological interna of other persons, among other reasons. They don't accept the renunciation of punishments or mild ones because they demand justice and revenge. Only the older children with 9 or 10 years of age replace the revenge punishments in favor of moderate and more suitable punishments.

The history of punishment law went through the same stages. As I already remarked, the whole premodern punishment law right across times and continents consisted of cruel practices such as beating, torturing, and humiliation, or liquidation by drowning, burying alive, decapitation, tearing to pieces, hanging, boiling, etc. These punishments were afflicted to those who committed crimes such as murder, betrayal, insult, theft, forging, lying, that is, not only for strong delicts but also for the lighther forms of crime. The epoch of Enlightenment after 1700 in Europe was the first culture in world history that abolished this sadistic form of punishment law and replaced it by more humane forms of punishment. The humanisation of punishment law has been continuing now stepwise for 300 years. However, Third-World nations widely differ in this process of imitation and cultural development.

In the view of children and primitive peoples god makes not only the laws but also the judgments before the courtyards. He governs both the general legislation and the single trials occurring in his theocracy. Children believe that sins or delicts receive their automatic punishment, caused by god, parents, adults, cosmos, nature, and history. The divine providence with its mystical influence will care for the fate destined for criminals who cannot escape from their punishments deserved. Developmental psychology has shown that every child across times and continents inevitably shares this belief called "immanent justice". The younger children are the stronger do they believe in immanent justice. Precausality and the magical-animistic tendencies are among the factors that cause this naïve belief. Children believe that a bridge collapses when flying apple thieves try to cross it because it wants to punish the children or it is ordered by god to do so (Piaget 1932; Havighurst & Neugarten 1955; Jahoda 1958c; Ellwanger 1980; Oesterdiekhoff 1997, 2009a, pp. 344-368, 2011, pp. 118-127, 2014c).

Children and premodern adults therefore believe that they can ask nature what they should do in future, which incidents happened in the past or the providence is planning. Oracles are nature's or god's news about future; ordeals are the same regarding the revelation of the past. Children like to draw straws or to count passing cars or to fight against each other in order to carry out oracles or ordeals. These hazard games decide on error or truth regarding any questions or contentions. Likewise premodern humankind asked the gods in ordeals who was guilty for any accusations. Ordeals are the main judicial procedures of the whole premodern humankind, more relevant than debates relying on proofs or other judicial instruments. Judicial oaths, judicial duels and judicial ordeals in the narrow sense have all ordeal character. Ordeals are to find among nature peoples in Black Australia, Black Africa, Indian America, Oceania, ancient and medieval Asia and Europe, that is, right across the whole premodern world without any exception. They lost some of its influence in Europe after 1200 but where practised there still by the era of Enlightenment and

later. In Africa, they are more or less frequently used by today (Evans-Pritchard 1976; Hallpike 1979; Lévy-Bruhl 1923; Oesterdiekhoff & Rindermann 2007; Oesterdiekhoff 1997, 2011, pp. 118-127, 2014c; Radding 1985; Tylor 1871; Wuttke 1860).

A typical procedure was that a person accused for whichever reason was subdued to the trial if he wanted or not. The person charged for whichever deed had to take poison – in case he died he was guilty of the charge (no matter if he was really guilty, according to formal operational stage standards); in case he didn't die he was freed from the charges (no matter if he was innocent or not, according to formal operational stage standards). The same logic governed the other ordeals, too, e.g. ordeal by fire or hot water or hot iron (wounds decided over the legitimacy of accusation), or by drowning a person or by duels (the winner was in the right).

As long as humans decide over life and sentence by using ordeals they strongly believe in immanent justice and in god. As long as humans use ordeals they fully stay on childish anthropological stages, on stages below the formal operational stage. If we only knew from ancient humans their ordeal practice this would suffice to evidence their childish anthropological stage beyond the slightest doubt. As modern adolescents now inevitably stop fighting over who is in the right and who is not and reject the other hazard games, as Europeans in history roughly 10 generations ago replaced ordeals and tortures (successors of classic ordeals basing on ordeal logic and valid by the era of Enlightenment) by the introduction of modern courtyards, relying only on judicial examinations of facts and witnesses (Oesterdiekhoff 1997, 2014c, 2009a; Hallpike 1979).

Children all over the world have difficulties in discriminating motives and consequences, subjective and objective factors, intentions and outcomes. They tend to make persons accountable for outcomes they actually did not want. The mere entanglement in negative consequences can be sufficient for a child to make another person responsible for them, charging him for satisfaction of afflicting him any punishment or compensation. Only older children develop the intellectual maturity to distinguish intentions and consequences more effectively and to avoid of making other persons responsible for outcomes they really did not intend and were not responsible for. Piaget called the early tendency of children mentioned “objective responsibility” and the later improvement “subjective responsibility” (Piaget 1932; Kohlberg & Gilligan 1971; Tapp & Kohlberg 1971; Mogdil & Mogdil 1976; Selman 1980).

The history of law likewise started with objective responsibility, called “Erfolgshaftung”, reaching the phase of subjective responsibility late, mainly during the era of Enlightenment. Damaged persons frequently searched for revenge even when the person accused did not intend the harm. Relatives of a killed family member tried to murder the charged person even then when he only had defended himself, when he did not intend to damage the dead person, or when he only was witness of the incident. Often enough the revengers killed a relative of the murderer believing this form of revenge be justified. The law afflicted punishments to persons, who could not prevent damages to occur but were nonetheless made responsible for them, or to persons who were only entangled in incidents without any personal involvement. Some years ago a trial in Turkey convicted a woman for having caused a car traffic accident because she walked on the sidewalk dressed by a short skirt, which distracted a male driver's attentiveness. This judgment reflects the typical mentality of the whole premodern law according to the principle “objective responsibility”. This principle is also to find in the phenomenon “collective responsibility” where a whole clan or city is made responsible for the crime of one of his members. It is to find in the praxis to punish animals for not having prevented a crime, e.g., birds not having warned the city about invaders, horses having made possible a kidnapping, etc. It is to find in present-day Sharia law where rapped women are killed on behalf of judicial decisions because they made sex forbidden either in extramarital or premarital form (Fauconnet 1920; Kaufmann 1958; Oesterdiekhoff 1997, 2014c, 2009a, pp. 372-404, 2015a, 2016d, e.).

Developmental psychology described that children initially do not discriminate human and natural laws, moral customs and physical regularities. Their understanding of both phenomena consists of a confusion or a mixture of both. They understand physical laws as if they were decisions and juridical laws as if they had a physical nature. God is the person who orders both things and humans what they have to do. Therefore, there is only one eternal law that governs the cosmos. On the part of humans god does not only give them the single judicial judgments, by ordeals, he also gives them the legislation, which is holy and unchangeable as physical laws are. Children interpret physical laws as prescriptions imposed by humans or gods physical entities obey

and follow. What modern adults understand as physical causality, children (and premodern adults) interpret as precausality, consisting of psyche (the sun wants to shine), physis (the sun shines), and morals (god or father told to the sun she should shine). Modern adolescents replace then their previously precausal, magical-animistic view by the causal interpretation, now understanding for the first time the existence of physical laws.

Further, children initially understand moral laws and customs as eternal, unchangeable, and holy. They don't grasp the historical nature of morals and manners, rules and customs. They provide that god, adults, and parents enacted "the" rules for all eternity. On the whole, they don't understand the difference between physical and social rules. God created only one form of legislation, binding both humans and things for all eternity. Correspondingly, modern adolescents with the rise of formal operations surmount the belief in the eternal and holy character of legislation and give birth to the ideas of democracy, according to it rules are changeable against the wishes of nation or people. Both ontogenetically and historically natural sciences and democratic ideas appear at the same time and stage, and for the same reasons. Theocracy and theology are replaced by democracy and natural sciences when humans attain the stage of formal operations (Piaget 1932; Tapp & Kohlberg 1971; Damon 1983; Havighurst & Neugarten 1955; Oesterdiekhoff 1997, 2013a, pp. 391-413, 2009a, pp. 336-344, 2014c).

The evolution of politics

Children's understanding of legislation also forms their understanding of politics. Children initially understand legislation as made by god, ancestors, adults, and parents, as something they themselves cannot influence. Children do not believe that they are allowed to make new laws or manners because there exists only one form of manners, laws, and customs that are holy and unchangeable. Therefore, children reject the idea of democracy and believe in the idea of autocracy or theocracy as the only form of legitimate government. Children support ideas of government where the leader has the right to decide alone upon group and society. Accordingly, they tend to not understand and to not accept the idea of liberty rights, assuming that the group always has to override the single person, they reject and don't understand the idea of tolerance for deviating opinions and minorities, ready to exclude deviating persons and to oppress individual opinions. Only during the second decade of life, modern adolescents replace the autocratic and authoritarian principles of political leadership by democratic ideas of government. Then they replace the idea of the holy law and autocracy by the idea of democratic legislation and government, and develop the ideas of tolerance and liberty rights.

Children combine the holy idea of legislation and state with bad sociomoral praxis while modern adolescents are characterized by a combination of the democratic idea and an improvement of sociomoral praxis. Children do not understand very well customs and manners, even not regarding marble games, and tend to misinterpret them in accordance with their egocentrism and their situational interests. They frequently behave antisocially by verbal and bodily aggressions, by a brutal defense of their interests against others, and by an intentional or unconscious ignorance of rules and good manners. However, they themselves do believe they would obey the holy rules. Modern adolescents, however, are better in understanding and obeying rules, laws, manners, and customs. Their sociomoral praxis has improved a lot due to their grown intellectual and moral maturity. Therefore, modern adolescents combine democracy with social commitment (Piaget 1932; Durio 1976; Damon 1983; Kohlberg & Gilligan 1971; Rosenberg 1988; Chamberlain 1907; Adelson & Bell 1970; Tapp & Kohlberg 1971; Selman 1980).

The correspondencies to the historical development of mankind are complete. Apart from the small Greek example, the whole premodern humankind has only had autocracies (tyranny, dictatorship, aristocracy, gerontocracy, monarchy). Right across the whole premodern world it was believed that the king or dictator has the right to rule over his people on behalf of god. He was seen as the representative of god entitled alone to enact laws and to decide in politics. He was the owner of country and people. Legislation was seen as made by god, as holy, unchangeable, as not exposable to the wishes of people. The whole premodern world did not distinguish human from physical laws. The primitive customary laws right across the continents only knew "the" law people have to obey. The whole premodern philosophy or political ideology supported this view, without any exception worth to be mentioned (Kern 1952; Radding 1985; Oesterdiekhoff 2013a, 2015f).

The epoch of Enlightenment was the first in world history that surmounted the era of autocratic ideologies. Locke, Montesquieu and Rousseau were the first thinkers in world history who asserted the illegitimacy of autocracy and established the ideas of democracy. They worked out in theory how democracy, constitutional state and division of powers could be institutionalized and function. They formulated the ideas of liberty rights and tolerance, the separation of church and state, and the abolishment of theocracy. The idea preceded the praxis. Some decades later humans made the first try to institutionalize the democratic ideas born in the theories of the three inventors of democracy. The American and French revolutions then were the first tries to transform the political systems from autocracies to democracies. What modern adolescents achieve during their second decade of their life, adults in history succeeded only during the past generations.

However, this transformation needed even in the Western world hundreds of years to complete. During the 19th century the political systems in the West established the status of constitutional states, with remarkable successes regarding free elections, division of political powers, freedom of the press and guaranty of liberty rights. The first democracies appeared in the USA and France, followed in the beginning of the 20th century by a couple of European countries. The next step was reached in the second half of the century when many more countries from other continents followed. Presently, the world is divided in democracies, half-democracies, and dictatorships.

Empirical surveys in developing countries reveal that huge percentages or even the majority of people prefer autocracies and reject democracies. Frequently, they chose in democratic elections parties and political programmes intending to abolish democracies or intending to maintain autocracies or authoritarian governments. For example, in recent years Egyptians elected the Muslim Brotherhood, Palestines the Hamas, and Libanese the Hisbollah, all parties which reject democratic principles, intending to introduce or to maintain dictatorships. These three examples hint at the fact that dictatorships exist due to the support of the crowd, whether it originates in free elections or not. Autocratic governments in the Third World could and can only exist because great percentages or majorities supported them. The low democratic consciousness is everywhere the cause to the existence of autocracies. Wherever the democratic consciousness increases, in consequence of psychological stage development, the institutionalization of democratic regimes will inevitably take place. Also the autocratic regimes in Asia can only exist because the peoples are in favor of "strong leadership", rejecting democratic principles and ideas, as the recent examples in Turkey or Indonesia show. This was the same situation as in Europe before 1945 where many peoples were unhappy with the principles of democracy, preferring "stronger" and autocratic regimes, fascist systems or monarchies. The insecure status of democracy in Europe from 1800 to 1945 and nowadays in the Third World reflects the still low psychological stage development (Oesterdiekhoff 2009a, pp. 261-283, 2013a, pp. 391-494, 2015a, pp. 98-104, 2014a, b, e, 2015f, 2016k; Radding 1985, pp. 74-134).

The correspondence is complete: Modern adolescents develop the ideas of the three thinkers by themselves when establishing the formal operational stage, as the philosophers had done 250-300 years previously, when attaining the adolescent stage in the realm of political thought. As the formal operational stage needs many developmental years to grow, causing the slow but continuous development of the political consciousness, as humankind needed generations to develop the formal operational stage and democratic consciousness to a certain height after their first seminal origination during the 18th century.

The correspondence between ontogeny and history does not only concern the transformation from autocracy to democracy but also the corresponding evolution from bad to good sociomoral praxis. As children are bad in their sociomoral praxis in consequence of their primitive mental state, as premodern humans are bad in moral life and community. As modern adolescents improve their sociomoral life, as modern adult humans perform a considerably higher sociomoral praxis than premodern humans do. The low sociomoral praxis of the premodern world consists of slavery, brutal treatment of lower classes, women, children, and animals, sadistic punishment law, corruption, enormous rates of delinquency, physical violence penetrating the whole society, disregard of deviating opinions, religious fanaticism, ignorance of minorities, etc. There is not one premodern society, including nature peoples such as those of Black Australians or American Indians, or the Greek-Roman or Chinese civilization, which does not match to the description mentioned. Modern civil societies with their safety, social security, social engagement, tolerance,

freedom of opinion, etc. are the opposite to any form of premodern society (Elias 1994; Pinker 2011; Staewen 1990; Oesterdiekhoff 2013a).

Cesare Lombroso and A. F. Chamberlain (1907) were right in saying that the child is close to the criminal or goes through stages of criminals when his moral and social consciousness is still low (likewise Damon 1983). Moreover, Lombroso and Chamberlain were right as they described that the premodern man is more criminal than the modern man due to his childish mental stage (likewise Pinker 2011; Oesterdiekhoff 2000, 2015a, 2013a; Elias 1994). The decline of delinquency rates in modern societies over the past 300 years is mainly caused by psychological stage development respectively the civilization process.

Considering Third World nations of today, the slow development process of politics and morals is observable. In comparison to the year 1900 the advancements right across the continents of the South are remarkable. However, the backbencher status of Third World nations regarding their sociomoral life remains preserved still by today despite their many advancements. Many of them manifest political, social, and moral forms of praxis that reflect medieval respectively childish psychological stages surmounted in the Western world 300 or even 1000 years ago. For example, the Arabian or Islamic nations have not established democracies and constitutional states by today, although having imitated democratic facades with parliaments, elections, and other elements of the Western democracies for decades. There is not one Arabian or Islamic nation that guarantees liberty rights, freedom of the press, or protection of minority rights in an acceptable way, as the United Nations Human Development Reports document. The Islamic understanding of legislation matches the holy law understanding of the whole premodern world, originating in children's law understanding described. Islam also rejects the idea of democracy, as the whole premodern world did and children do, for the reasons mentioned. The Islamic world mainly harbors dictatorships, monarchies, etc., but not democracies and constitutional states (Oesterdiekhoff 2013a, pp. 391-494, 2016k).

The political life right across the Islamic world is a complete human disaster. Hundred thousands of people were killed in Iran under Khomeini; nearly every Iranian family lost some of its members. The dictators Ghaddafi and Saddam Hussein each killed hundred thousands of their people. Nobody can live a free life without running a risk to be imprisoned for any reasons. The whole Islamic world knows oppression of ethnic and religious minorities. The share of Christians in the Middle East 100 years ago amounted roughly 25%. Now it is reduced to about 1% in consequence of prosecution or liquidation. Civil wars against Christians happened in Lebanon, Sudan, Nigeria, and Ivory Coast during the past decades, and oppression of them happens in present-day Turkey, Iraq, Syria, Egypt, Indonesia, Malaysia, and elsewhere. In recent years, nations such as the Maldives, Qatar, and Bahrain declared overnight non-Muslims born in these countries as stateless. Due to Islamic prosecution, thousands of Jews had to leave France during the recent years where their safety is not anymore guaranteed. Rivalries and civil wars between different religious groups such as Alevites, Sunnits, and Shiits are quite normal in Islamic nations, more or less comparable to the tensions between Protestants and Catholics in Europe 400 years ago. Whoever abandons his former Islamic belief has to face the Sharia law that orders the death penalty, a more or less practised law right across the Islamic world (Bawes 2006; Ye'or 2005; Dewinter 2010; Laqueur 2006; Oesterdiekhoff 2013a, pp. 391-494, 2016k). Death penalty for apostasy existed in Europe during the Middle Ages, too.

The bloody punishment law, called Sharia, similar to the sadistic punishment law as it existed throughout the whole premodern world, in Europe by 1700 roughly, is still working practically in the whole Islamic world. Losing arm, hand or leg for theft may happen in nations of the Islamic world, Black Africa or the Andes as it was custom in Europe by 1700. Maltreatment of women and forced marriages are widespread in some developing countries, as it was custom in former periods of history. High rates of corruption and delinquency are typical for most developing nations. It is obvious that not social structures mainly but the childish mentality accounts to severity and frequency of many forms of delict occurring in these nations. Honor killings and rape of women belong to those forms of delinquency that immediately evidence their origin in lower psychological stages. The New Year's Eve 2015, in Cologne, proves of the fact that not social structures but uncivilized manners respectively lower psychological stages account to such forms of criminality, never seen in Germany's crime history before (Oesterdiekhoff 2016m).

Social scientists, journalists and politicians are completely unable to understand these phenomena because they don't know theories to explain their psychological origins respectively the structural-genetic theory programme. During their education they had been exposed to materialistic and structuralistic theories such as system theory, Durkheimian and Marxian theory and methodology, always making a distinction between societies and humans, assuming societies develop on their own, according to materialistic and environmental requirements. They have never heard that humans of different nations stay on different psychological stages. Therefore, they have no idea that the disastrous social, political, cultural, and economic patterns of Third World nations, especially those from the Islamic world, originate in psychological stages of their residents (Oesterdiekhoff 2013a, pp. 391-494).

However, the proof of this fact is easily to get: Migrants of these nations continue to make the same things in the more developed nations, over the whole range of life conduct, including missing or low school degree, low job qualification if any, archaic gender relations, religious fanaticism, rejection of democracy, high rates of delinquency, etc. Even the second and third generations of Muslim migrants refute assimilation while preferring to continue their archaic customs. The political elite, however, educated in Durkheimian or Marxian methodology, does everything to ignore and to misinterpret the data related. Their blind eye can arouse consequences worse than those of the World Wars, whose damages disappeared after some decades. There are many authors who predict a decline or a devastation of Western Europe in consequence of the rising share of those migrants in its population. As Bawes says Europe is now in a new Weimar situation; it has to decide whether it will address the situation by strict containment of the increase of the Muslim's share in the total population or whether it prefers to become a Islamic "civilization" such as Iran or Turkey or to experience civil wars such as in Lebanon or ethnic conflicts such as in Israel or South Africa (e.g., Bawes 2006; Ye'or 2005; Dewinter 2010; Laqueur 2006).

World history and social evolution

It is a priori absolutely clear that it is impossible to explain world history and social evolution without consideration of the psychological stage development of humans as their driving motor. The structural-genetic theory programme is the first theory that has radically reconstructed world history and social evolution in terms of developmental psychology. However, this programme has predecessors such as the theories of Comte, Spencer, Lubbock, Müller-Lyer, Elias (1994), Habermas (1976), and Piaget (1975, vol. 10).

Provided that Homo sapiens appeared 200.000 years ago then he lived during 95% of his history as gatherer and hunter. Research found that population growth is the main cause to the Neolithic revolution, the invention of farming and housing, happening in several regions of the world 10.000 years ago and later. At that time the worldwide human population amounted of 5-10 millions, a number too big in order to allow a Stone Age-economy to persist. Farming alone can carry world populations bigger than 10 millions. The question is: Why did humankind need 190.000 years to reach that small number? Obviously, humankind suffered a lot, always being exposed to extinction, although every woman principally could give birth to 4, 6 or 8 children. Actually or statistically, Stone Age woman could raise only 2 or 2,3 children (Oesterdiekhoff 1993, 2005, pp. 54-80, 2013a, pp. 539-548). The reason to this low fertility rate is mainly not to find in environmental or natural conditions but in cultural ones. Obviously, man the hunter was not as successful in his survival strategies as anthropologists have been telling us during the last generation. The hindrances regarding population growth coming from low psychological stages are numerous, each of them enough to blockade the increase of populations. Magic is one manifestation of the lower psychological stages that suffices to restrain population growth. For example, the archaic belief every death be caused by a magical assassination, leading to a search for the alleged murderer and his liquidation, has alone restricted population growth. The other manifestations of magic such as prosecution of witches and sorcerers, human sacrifices to the gods, interpretation of births as ordeals, and magical medicine have to be added to the psychological causes that limited population growth in the Stone Age (Frazer 1932; Evans-Pritchard 1976; Tylor 1871; Oesterdiekhoff 2013a, 2016e). Further causes coming from the lower stages are cannibalism - when humans eat each other they prevent themselves from spreading throughout the world -, homicide and tribal wars, and incapacity to care for the simplest measures of protection. For example, Black Australians did not live in huts or did not invent clothes, not during 50.000 years,

although it is very cold at night in the desert; Pirāha allow their very young children to play with sharp knives or to run other deadly risks, etc.

Had man the hunter stood on the formal operational stage then he had raised his numbers to 10 millions shortly after his arrival, around 190.000 years ago. The whole chain of agricultural and industrial revolutions would have taken place at that early time. On the whole, developmental psychology is necessary to explain the long duration of Stone Age economy and society, the longest period of human existence on the planet. Anthropologists are led astray in their belief that man the hunter had already had the same level as modern man has (Oesterdiekhoff 2013a, 2014d, 2016e, 2011, pp. 176-186).

The second phase of social evolution, the agricultural phase, lasting 10.000 years, consisted of peasant societies and agrarian civilizations. Their political, cultural, social, and religious characteristics reflect the prevalence of the lower stages. Monarchy, aristocracy, and tyranny shape their political life, slavery, serfdom, and unequal gender relations their social life, and religious fanaticism and ancestor worship their religious life. Magic and witchcraft, superstition and irrationality penetrate the whole premodern world. The development of sciences and technologies is weak and often almost missing, mostly restricted to architecture and arts.

Nonetheless, the rise of civilization proceeds during these 10.000 years stepwise and continuously. The Roman-Greek civilization is more advanced than the civilizations of Mesopotamia and Egypt. Egypt's society with its pharaoh, its pyramids, and its animals' worship appears more archaic than the culture of Athens or Rome. Egypt's literature consists only of myths and did not know the epos, tragedy or novel. The Greeks invented, surmounting the levels of Mesopotamia and Egypt, philosophy, sciences, democracy, and improved the fine arts. The Romans, the Indians and the Chinese created cultures during antiquity whose levels were only surmounted by the modern, industrial civilization after 1750 (Oesterdiekhoff 2013a, pp. 195-214, 287-329, 539-548, 2015a, pp. 104-108, 2005, pp. 54-80, 2014d, e).

On the whole, the slow and blockaded development of culture, science, technology, economy and politics of the entire premodern world roots in the lower psychological development of ancient people. Had they already occupied formal operational stages they had already established the modern, industrial civilization during ancient times. Especially the ancient civilizations with their empires, population agglomerates, big cities, bureaucracies, traffic systems, etc. had the infrastructural prerequisites to establish modern, industrial societies. The last cause to the blockade to erect a further evolutionary stage – to establish modern civilization- is the persistence of the lower stages.

The proof of this thesis is given by the proof that the rise of the formal operational stage actually accounts to the emergence of the modern, industrial civilization. As above shown, the formal operational stage appeared in psyches and brains of the scientists of the 17th century, who created the physical sciences "in strictu sensu". Galilei, Bayle, Boyle, Newton, Guericke, Descartes, etc. belonged to the founders of the new sciences. The steam engine of J. Watt directly results from these new sciences, chemistry, metallurgy, and mathematics. This engine revolutionized industrial economy and transportation, and was the beginning of modern, industrial society on the part of technology and economy. There is a strong link between formal operations, rise of sciences, science-based technologies, and industrialization.

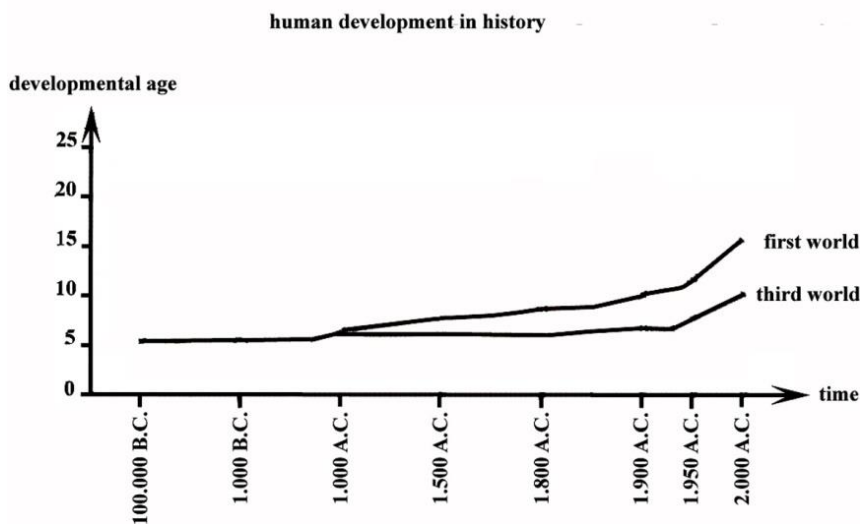
The causal role of the formal operations to the rise of modern, industrial society also concerns the emergence of the era of Enlightenment, democracy, and humanism. These three revolutionary phenomena consist of criticism of superstition, slavery, and brutal punishment law, of establishment of constitutional state and liberty rights, and of support of world peace, etc. These three phenomena are manifestations of the formal operations, as already shown. They all are intellectual phenomena born in the fourth stage of human development. They originated during the same time as sciences and industrial economy grew. This evidences that psychological causes account not only to the rise of sciences, Enlightenment, humanism and democracy but also to the rise of modern economy. On the whole, the five main structures of the modern, industrial civilization all originate in the psychological advancements of humans, in the evolution of the fourth stage of human development (Oesterdiekhoff 2014a, b, d, e, 2013a, pp. 549-580, 2011, pp. 192-205, 2015a, pp. 104-109, see also Piaget 1975, vol. 10; Ziegler 1968; Habermas 1976). Therefore, the modern, industrial civilization manifests not only a higher cultural stage than the previous civilizations, including the ancient and medieval civilizations, but also a higher

psychological stage. As above shown, PCCP has proven over the last 80 years that modern humans develop the fourth stage of human development, while premodern humans occupy only the lower stages. This fact is fundamental to understanding the modern world and globalization as well.

The superiority of modern, industrial civilization concerning economy, sciences, technology, politics, law, morals, manners, education, social affairs, gender relations, religion, etc. solely roots in their higher human development. The most advanced nations of the world including the nations of North America, Europe, Japan, South Korea, Taiwan, Singapore, Israel, Australia and New Zealand originates in the fourth stage of human development. These nations, being the top of human development and social evolution over the whole history of humankind, base on certain patters of mind and behavioral characteristics such as intelligence, rationality, peacefulness, tolerance, diligence, attentiveness, law obedience, responsibility, and morals humans on lower stages do not have to that high rate (Oesterdiekhoff 2011, pp. 192-206, 2013a, pp. 549-580; Staewen 1990).

The great advancements of many a threshold and developing nations over the past generations result from their psychological development, too. However, most of their many problems, of their disastrous conflicts and failures, come from their still lower developmental stages. Their mostly terrible political systems, their often fanatic religion, exploitation and oppression, unequal gender relations, delinquency rates, and warfare mentality root in their psychological development. The Islamic Djihad mentality, widespread in the common Islam population, reflects imperialistic attitudes modern peoples have surmounted after 1945. It mirrors rather imperialistic attitudes Europeans had 500 years ago, not 150 years ago. It is more primitive than the European imperialism as it was around 1900, clearly visible in his religious, political and social dimensions (Bawes 2006; Ye'or 2005).

Many countries of Asia and Latin America are on a good way, only some Islamic and African nations reveal archaic structures and cultural blockades. The main goal of developmental policy must be to raise their psychological stages by education and consequent foreign policy. Money transfers and servile foreign policy will only strenghten the perseverance of archaic manners, as can be seen in the smooth and ignorant tendency of Western policy regarding Islamism and Islamic dictators.



The difference between traditional sociology and the structural-genetic theory programme also concerns the migration policy. Traditional sociology has no idea of the psychological differences between humans of different cultures. Therefore, it is a dangerous discipline because it misleads political elites to ignoring the problems of mass immigration of humans of underdeveloped nations. 30-40 % of Islamic people born in Europe, right across the single nations from the Scandinavian ones over France and Germany southwards to Italy and Spain, have no school degree, the same rate has no job qualification, nearly the same rate of adult Muslims in

Europe live on social welfare, roughly 70% of prisoners in Spain and France are Muslims, some percentages of them live in polygamy, etc. 46% of the Turkish living in Germany want the overweight of Islam in Germany and 25% of the Turkish regard atheists as “inferior beings” (Info Research Group 2012). The Muslims do not sufficiently assimilate even when staying in Europe for the third generation but dream of Khalifat and Djihad, widely supporting Sharia and terrorism such as suicide bombers. Their population growth within Europe is a ticking time bomb when nothing happens from a policy that it deserves it to be named as responsible and insightful (Bawes 2006; Dewinter 2010; Laqueur 2006; Ye’or 2005).

On the whole, developmental psychology is the fundamental discipline to explain world history and social evolution from the Stone Ages over the agrarian phase to modern, industrial civilization. The dialectics of psychological stage development on the one side and institutional, economic and technological artefacts on the other side is the motor that caused the evolutionary trend leading to modern, industrial civilization. It is evident that the slow psychological development respectively the prevalence of the lower stages across history is the main cause to the long duration both of Stone Age society and the agrarian phase, and to the fact that modern, industrial civilization appeared as late as it actually emerged, namely, 200.000 years after the race was born. Had Pleistocene man already occupied the formal operational stage then humankind had created the modern civilization already shortly after its arrival on the planet.

3. Conclusion

The fact that premodern humankind stood on anthropological or psychological stages of children 5 to 12, frequently 5 to 7, and that modern humans establish stages of humans 10-25 is the most important fact ever raised in the world history of the human disciplines. The whole knowledge of developmental psychology to describe anthropological structures of personality, psyche, mind, rationality, logic, physics, social understanding, politics, law, and religion is transferable to disclose the history of humans on the planet, the history of humans from the Stone Ages over ancient and medieval times to the modern world. Developmental psychology is not only the psychology of children and adults but is the psychology of premodern man and of the psychogenetic transformation to modern man. It is the psychology of the human being in world history. Developmental psychology respectively the structural-genetic theory programme is the historical anthropology or historical psychology. Moreover, it is the most important theory of the human being ever raised in the history of sciences. It is more fundamental and has more explanatory power than any other theory of the human being such as philosophical anthropology, evolutionary psychology (sociobiology, human ethology), rational choice theory, behaviorism, and psychoanalysis. It is the central theory of the human being.

Every human discipline, intentionally or not, depends on a theory of the nature of the human being. Developmental psychology respectively the structural-genetic theory programme has conquered new dimensions of knowledge and has established new scaffolds of theory building regarding every single human discipline. The new theory programme is central to the understanding of social evolution and world history, e.g. for the long duration of the Stone Age period and the emergence of modern, industrial society. It is central to the explanation of the evolution of economy, social structures, law, politics, morals, manners, delinquency, violence, warfare, folklore, and religion. Without the new theory is it impossible to understand the early steps of the evolution of the phenomena mentioned and the trajectories and trends they follow in history.

The new theory is crucial to understanding the population growth in history, the dominance of authoritarian structures in ancient politics and the evolution of democracy and constitutional state in recent times, the transformation from sadistic to humane forms of punishment, from objective to subjective forms of legal responsibility, from ordeal practices to rational forms of jurisprudence, the decline of violence and warfare in recent history, and the transformation from unequal to equal gender relations. The new theory is essential to understanding the nature of colonialism, imperialism, and the recent World Wars. The new theory is fundamental to understanding the emergence of sciences “in strictu sensu” after 1640 and the history of philosophy from ancient metaphysics to modern, rational philosophy. It is crucial to the description of the emergence of the modern, industrial civilization with its five main features Enlightenment, humanism, democracy, sciences, and industrial economy. It is central to understanding the

continuous development of the First World during the past 250 years, the still backbencher status of the threshold and developing nations, and the entire phenomenon of globalization.

The new theory is the first scientific theory of religion, according to the principle of the sufficient reason. The history of religion from ancestor worship and nature religion over monotheistic and deistic conceptions to agnosticism and atheism follows psychological stages. Child psychology and “full religion” (M. Eliade) are two parts of the same phenomenon. Children’s second sceptical crisis (Bovet 1951; Thun 1959; Hyde 1990) corresponds to the weak and tolerant religiousness of the 20th century’s Western peoples. Educated people of substage B of formal operations cannot avoid establishing agnosticism and atheism, the replacement of religion by humanism and rationality. Rival theories of religion, functionalism, general psychology, evolutionary psychology, phenomenology, etc., have no chance to disclose the phenomenon, its nature and essence. Only the new theory explains origin, existence, and disappearance of this most remarkable phenomenon (Oesterdiekhoff 2007, 2011, pp. 147-162, 2013a, pp. 215-240, 2015d, 2016i, 2017).

The new theory programme is the most fundamental theory of world history and social evolution. It is the most fundamental theory regarding the description of the developmental steps of the ancient civilizations from Mesopotamia and Egypt over the Roman and the Chinese Empires to the modern, industrial civilization. It is the fundamental theory regarding the rise of the Western civilization and its nature and essence. It is the fundamental theory regarding the nature of democracy and civil society, liberty rights and constitutional state. It is the fundamental theory concerning the rise of Western humanism and morality, the rise of the Free World. It is the fundamental theory regarding the rise and nature of the sciences “in strictu sensu”, Western rationality and competence. It explains the early Western supremacy, the predominance of the USA and Europe in the former generations, their previous colonialism and imperialism, and the recent advancements of the threshold and developing nations. The emergence of the fourth stage of human development in the Third World is central to understanding of the decline of the archaic beliefs and customs and the recent process of globalization in terms of economics, politics, and culture.

Therefore, the structural-genetic theory programme is the fundamental theory of every single human discipline. It bases history, sociology, economics, political sciences, psychology, ethnology / cultural anthropology, religious studies, pedagogics, philosophy, philology, archaeology, linguistics, Sinology, Egyptology, American studies, etc. (Oesterdiekhoff 2015a, pp. 159-172, 2011, pp. 206-220, 2013a, pp. 581-630, 2013b, 2016d, f).

Without the implementation of the new theory it is practically inevitable to come to wrong or misleading or superficial descriptions. Only in rather rare cases is it possible to present correct descriptions that correspond to the standards of the new theory without their explicit consideration. The legitimacy of this conclusion is easily to understand when considering authors may present theories regarding punishment law, ancestor worship, nature religion, magic, animism, trials against animals, rise of sciences, rise of democracy, cannibalism, Aristotelian philosophy, etc. without developmental psychology. Then the danger is overwhelmingly great that superficial or misleading interpretations are being presented. On the whole, the history of the human disciplines is full of such superficial or wrong explanations and theories.

Therefore, the structural-genetic theory programme is the unifying theory of the human disciplines, of the human history on earth, of the societies right across the five continents, of societies representing all types of social evolution, of the cultures and races, and of the human activities on the planet. It levers the foundations of the human disciplines upon higher stages than ever expected before and manifests a scientific revolution these disciplines have never experienced in their whole history.

The structural-genetic theory programme is today the only theory that fulfills the requirements of a general theory of the human disciplines, according to the following criteria:

- a theory of the psychogenetic evolution of the humankind
- a description of social evolution from the Stone Ages to modern civilization
- it explains both the Neolithic and the industrial transformation
- it describes the development of population, economy, social structure, culture, religion, politics, sciences, law, morals, violence, customs, etc.
- it concerns all five continents and all cultures

- it likewise relies on psychology, ethnology, history, sociology, and all other human disciplines (Oesterdiekhoff 2015a, pp. 148-149).

Hermann Schneider (1909, p. VIII) and James Frazer (1932, p. 32) predicted that developmental psychology would implement to the human disciplines those foundations Newtonian mechanics and Darwinian theory imparted to physics and biology. This judgment is right and necessary. They added that in their time developmental psychology was not sufficiently prepared to carry out the transfer work necessary but that in future the true Darwins of the human disciplines would appear. Many great names of former generations contributed to this transfer work, among them Tylor, Frazer, Lubbock, Chamberlain, Romanes, Comte, Spencer, Bastian, Lamprecht, Feuerbach, Cassirer, Elias, Stern, Werner, Jaensch, Zeininger, Koffka, Luria, Wygotski, Piaget, Wallon, Descoedres, Lévy-Bruhl, Allier, Murphy, Blondel, Inhelder, etc.

However, the great advancements, especially manifested in the work of Piaget, Werner, and Lévy-Bruhl, did not continue in the right way because the political climate changed after 1945 and especially after 1970. Decolonization, the loss of archaic structures, the emancipation of the Third World and the decrease of self-esteem in consequence of the wars caused the West to replace their former leading theory of civilization and developmentalism by cultural relativism and the idea all humans on earth have always had the same amount of intelligence, humanism and rationality. These ideologies replaced the former theory of developmentalism in a radical manner to an extent that scientists born after 1940 usually haven't the knowledge accumulated by the list of the scholars mentioned. Whole libraries of knowledge became forgotten and the Darwinian revolution in the human disciplines, hopefully prepared by the listed authors, vanished before it really succeeded. The two leading ideologies of our time, cultural relativism and universalism of mind, prevailing in sciences, politics, and mass media, have declined the standards within the human disciplines, and have blockaded their advancement (Oesterdiekhoff 2009a, 2016d, j).

The human disciplines are now fragmented and haven't any interdisciplinary roof worth to be mentioned. Moreover, they even haven't any fundamental theories within their respective disciplines. Economics, sociology, political sciences, ethnology, etc. are not based upon a general theory as evolutionary theory in biology or quantum mechanics and relativity theory in physics. A general sociological theory does not prevail; the discipline knows system theory, rational choice theory, risk society theory, Marxian theory, Durkheimian methodology, Weberian theory, phenomenology, symbolic interactionism, etc. as competing theories. None of them can convince any intelligent observer. Not one of the theories mentioned can compete with the structural-genetic theory programme. Ethnology knew only two earlier revolutions, made by scholars such as Frazer, Tylor, Lubbock, Bastian, and Waitz, and later by Lévy-Bruhl. These two previous revolutions prepared the theory of developmentalism, caused by Piaget, Hallpike, and Oesterdiekhoff. Political sciences, history, economics, religious studies, philology, etc. were never ruled by any truly fundamental theories.

I illuminate the blockade of sciences regarding ethnology and sociology. Current ethnology, not resorting on developmentalism, is incapable to explain the phenomena magic, animism, nature religion, ancestor worship, ordeals, death magic, belief in ghosts, shamanism, belief in witchcraft, etc. The representatives of the discipline try to explain these phenomena in terms of social structures or in terms of manifestations of the eternal nature of the human being, as reasonable responds of humans to the conditions of life or as symbolic meanings (Levi-Strauss 1958; Eliade 1974, 1976). It is completely impossible to disclose the phenomena basing on such superficial considerations. Frazer and Lévy-Bruhl would turn crazy when forced to read current textbooks of ethnology.

The situation in sociology is similar. Comte and Spencer founded the discipline as a general theory of the human disciplines, basing on developmentalism, and covering the whole history of the human existence on the planet. They defined what is to understand with "great sociology". N. Elias (1994) was one of the few who tried to follow their tradition, however, on a scanty basis (see Oesterdiekhoff 2000). The first great revolution in the entire history of sociology was made by the structural-genetic theory programme, a theory that covers every human discipline and the whole history of humankind on earth. This theory covers both the evolution of mind and society, including the evolution of religion, sciences, philosophy, worldview, morals, politics, law,

delinquency, violence, wars, etc. Both the heritage and the supremacy of the new theory with reference to the theories of Comte, Spencer and Elias are apparent.

No other theory such as those presented by Marx, Weber, Durkheim, Parsons, Luhmann, Coleman, etc. has comparable standards and knowledge to offer. The system theory is discredited by its mere lack of any theory of the human being worth to be mentioned. It is discredited by its complete ignorance of the psychogenesis of humankind, by its incapacity to understand the phenomena of religion, sciences, law evolution, etc. System theory is not a scientific theory but mere scholasticism, the wish to understand and master reality by words and not by facts. Marx, Weber, Durkheim and Parsons suffer from their inability to understand the nature of primitive man and of psychogenesis. Their theories cannot disclose the evolution of sciences, philosophy, law, politics, morals, manners, economy, population history, etc. because they had no psychological science at hand. The structural-genetic theory programme is today the only one that explains the common origin and the trajectories of mental and institutional phenomena alike. It is today the only one that defines "great sociology". The four authors mentioned did not find the breakthrough to formulate great sociology respectively the foundations of the human disciplines (Oesterdiekhoff 2015a, pp. 135-158).

Today's wellknown sociologists, psychologists, and ethnologists, however, are still below the standards of their classic predecessors. Adorno, Marcuse, Mead, Goffman, Gehlen, Dahrendorf, Schelsky, Luckmann, Beck, Coleman, Harris, Alexander, Levi-Strauss, Wallerstein, Foucault, Sennett, Giddens, Bourdieu, Touraine, Boudon, etc., did not even touch the requirements to the definition of great sociology respectively the general theory of humankind and history, of the foundations of the human disciplines. They have nothing to do with a general theory of history or with a general theory of the human disciplines, not even Gehlen, the most intelligent scholar of the list. If one would remove these authors from the history of the human disciplines, nothing really important would miss. Not one of them contributed to the true foundations of the human disciplines. However, most sociologists currently really believe that these authors belong to those that define standards and knowledge of present-day social sciences. This alone evidences that almost every sociologist of today has not any knowledge and insight into that what true social sciences really provide.

Piaget is not only the greatest developmental psychologist, he rather is the greatest psychologist in history, much more relevant than Lewin, Freud, Skinner, Binet, Eysenck, etc. Moreover, he is the Darwin and Einstein of the humanities, more relevant than any other of their representatives. The next step of the ladder downwards is occupied by those that did the transfer work of developmental psychology to the humanities and to the reconstruction of history. Some more steps deeper is Lévy-Bruhl to find, and then, still more downwards, great scholars such as Frazer, Luria, Tylor, Lubbock, etc. Some further steps still more below finally are Elias, Comte, Spencer, etc. Only after them appear authors such as Weber, Durkheim, etc. Then and only then come the authors currently wellknown, authors such as Coleman, Bourdieu, etc. More below on the ladder are the 99% of the university social scientists who never contribute to the foundations of their disciplines. These people have not even the slightest idea of that what social sciences or human disciplines really require; they understand these disciplines how medieval philosophers would interpret Darwin or Einstein. They come close to the true foundations of sciences as butterfly-hunters approach to the standards of Darwinian biology or plumbers to Einsteinian physics.

"La mentalité primitive" of Lévy-Bruhl has a greater scientific relevance than the entire library written by the above-mentioned list of authors starting with Adorno, Marcuse, etc. altogether. The "Collected Works" of Frazer (1994) are more fundamental than the contributions of the currently publishing most wellknown sociologists and ethnologists such as Sennett, Bourdieu, etc., altogether. This judgment gives a first insight into the breakdown of standards and knowledge happening after 1945/1970.

In case social scientists want to prevent the further drop of the human disciplines in comparison to the natural sciences then they are admonished to follow the structural-genetic theory programme as the true heir of the great early achievements of Comte, Piaget, Tylor, Frazer, Lévy-Bruhl, Werner, Cassirer, Elias, Luria and related scholars. From that does not only depend the recovery of the human disciplines but also the survival of the Western civilization from the two challenges of our time, the own weakness in consequence of cultural relativism and the growing threat by the barbarians living within and outside our borders.

References

1. Adelson, J. & Bell, L. (1970). Adolescent Perspectives on Law and Government. *Law and Society Review*, may, 495-504.
2. Allier, R. (1929). *The mind of the savage*. London: Bell.
3. Anthony, S. (1940). *The child's discovery of death*. London: Kegan Paul, Trench and Trubner.
4. Baschwitz, K. (1963). *Hexen und Hexenprozesse* [Trials against witches]. München: Rütten & Loening.
5. Bawes, D. (2006). *While Europe slept. How radical Islam destroys Western Europe from within*. New York: Doubleday.
6. Bering, J. & D. Bjorklund (2004). The natural emergence of afterlife reasoning as a developmental regularity. *Developmental Psychology*, 40, 217-233.
7. Berry, J. W. (1974). Radical cultural relativism and the concept of intelligence. In Berry, J. W. & P. Dasen (Eds.), *culture and cognition* (pp. 225-230). London, England: Methuen & Co.
8. Beth, K. (1978). Das Verhältnis von Religion und Magie [The interrelationship between magic and religion]. In L. Petzold (Hrsg.), *Magie und Religion*, (pp. 27-46). Darmstadt: Wissenschaftliche Buchgesellschaft.
9. Bettelheim, B. (1997). *Kinder brauchen Märchen* [Children need myths]. München: DTV.
10. Blair, J. R., J. S. McKee & L. F. Jernigan (1986). Children's belief in Santa Claus, Easter Bunny, and Tooth Fairy. *Psychological Reports*, 46, 691-694.
11. Blondel, C. (1926). *La mentalité primitive*. Paris: Stock.
12. Bovet, P. (1951). *Le sentiment religieux et la psychologie de l'enfant*. Neuchâtel: Delachaux et Niestlé.
13. Brenner, C. (1978). *Grundzüge der Psychoanalyse* [Psychoanalysis]. Frankfurt am Main: Fischer Verlag.
14. Buckley, M. J. (1990). *At the origins of modern atheism*. New Haven, London: Yale University Press
15. Bühler, C., & Bilz, J. (1977). *Das Märchen und die Phantasie des Kindes* [Myth and imagination in the child]. Berlin, Germany: Springer Verlag.
16. Bühler, K. (1930). *Mental development of the child*. New York : Harcourt.
17. Campbell, J. (1960). *The masks of the god*. New York: Penguin Books.
18. Cassirer, E. (1925). *Das mythische Denken* [Myths]. Berlin: Cassirer Verlag.
19. Chamberlain, A. F. (1907). *The child: a study in the evolution of man*. New York: Walter Scott.
20. Childers, P. & M. Wimmer (1971). The concepts of death in early childhood. *Child Development*, 42.
21. Cole, M. & J. Bruner (1974). Cultural differences and inferences about psychological processes. In Berry, J. W. & P. Dasen (Eds.), *culture and cognition* (pp. 231-246). London: Methuen & Co.
22. Cole, M. & J. Gay (1967). *The new mathematics and an old culture*. New York: Holt, Rinehart & Winston.
23. Cole, M. & S. Scribner (1974). *Culture and thought*. New York, NY: John Wiley & Sons.
24. Cole, M., Gay, J., Glick, J. A. & D. W. Sharp (1971). *The cultural context of learning and thinking*. New York, NY: Basic Books.
25. Damon, W. (1983). *Social and Personality Development*. New York: W. W. Norton & Company.
26. Darwin, C. (1998). *The Descent of Man*. New York: Prometheus Books.
27. Dasen, P. & J. Berry (1974). *Culture and cognition. Readings in cross-cultural psychology*. London: Methuen & Co.
28. Dasen, P. (1973). Piagetian research in Central Australia. In G. E. Kearney et al. (Eds.), *The psychology of aboriginal Australians* (pp. 89-96). New York, NY: Wiley.
29. Dasen, P. (1974a). Cross-cultural Piagetian research: a summary. In Dasen, P. & Berry, J. (Eds.), *Culture and cognition. Readings in cross-cultural psychology* (pp. 409-424). London, England: Methuen & Co.

30. Dasen, P. (1974b). The influence of ecology, culture and European contact on cognitive development in Australian Aborigines. In Dasen, P. & Berry, J. (Eds.), *Culture and cognition. Readings in cross-cultural psychology* (pp. 381-408). London, England: Methuen & Co.
31. Dasen, P. (Ed.) (1977). *Piagetian cross-cultural psychology*. New York, NY: Gardner Press.
32. Dawkins, R. (2006). *The god delusion*. London: Bantam Press.
33. De Lemos, M. M. (1973). The development of conservation. In G. E. Kearney et al. (Eds.), *The psychology of aboriginal Australians* (pp. 71-88). New York, NY: John Wiley & Sons.
34. DeGroot, J.J. (1910). *The religion of the Chinese*. New York: The Macmillan Company.
35. Demetriou, A. & A. Efklides (1987). Experiential structuralism and neo-Piagetian theories: toward an integrated model. *International Journal of Psychology*, 22, 679-728.
36. DeVries, R. (1967). Constancy of generic identity in the years three to six. *Monographs of the society for research in child development*, 34, 3, 1-67.
37. Dewinter, P. (2010). *In 'ch Allah. Die Islamisierung Europas*. München.
38. Dieckmann, H. (1995). Die symbolische Sprache der Märchen [Symbols in myths]. In W. Laiblin (Hrsg.), *Märchenforschung und Tiefenpsychologie* (pp. 442-470). Darmstadt: Wissenschaftliche Buchgesellschaft.
39. Durio, H. F. (1976). A taxonomy of democratic development. A theoretical interpretation of the internalising of democratic principles. *Human Development*, 19, 197-219.
40. Durkheim, É. (1965). *The elementary forms of the religious life*. New York: The Free Press.
41. Eliade, M. (1974). *Death, afterlife, and eschatology*. New York: Harper & Row.
42. Eliade, M. (1976). *Myths, rites, and symbols*. New York: Harper & Row.
43. Elias, N. (1994). *The civilizing process*. Vermont: Williston.
44. Ellwanger, W. (1980). *Die Zauberwelt unserer Kinder* [Magic in children]. Freiburg: Herder Verlag.
45. Etuk, E. (1967). *The development of number concepts*. Columbia University: Teachers College.
46. Evans, E. P. (1906). *The criminal prosecution and capital punishment of the animals*. London & Boston: Faber & Faber.
47. Evans-Pritchard, E. E. (1976). *Witchcraft, oracles, and magic among the Azande*. Oxford, England: University Press.
48. Everett, D. (2008). *Don't sleep, there are snakes. Life and language in the Amazonian jungle*. New York, NY: Pantheon.
49. Fauconnet, P. (1920). *La responsabilité*. Paris : Alcan.
50. Ferenczi, S. (1985). *Bausteine zur Psychoanalyse* [Psychoanalysis]. 1. Band: Theorie. Berlin/Stuttgart/Wien: Hans Huber Verlag.
51. Feuerbach, L. (1985). *The essence of Christianity*. New York, NY: Harper & Collins.
52. Fischer, M. (2005). *Tierstrafen und Tierprozesse* [Punishment and trials against animals]. Münster / Hamburg, Germany: Lit-Verlag.
53. Flavell, J. (1977). *Cognitive development*. New Jersey: Prentice Hall.
54. Flynn, J. (2007). *What is intelligence?* Cambridge: University Press.
55. Fortune, R. F. (1963). *Sorcerers of Dobu*. New York, NY: Dutton.
56. Frazer, J. G. (1911/1922/1924). *Belief in immortality and the worship of the dead*. Three vols. London: Macmillan.
57. Frazer, J. G. (1932). *Mensch, Gott und Unsterblichkeit*. Leipzig, Germany: Hirschfeld Verlag. (English version: *Man, god, and immortality. Thoughts on human progress*. London, England: Macmillan, 1927)
58. Frazer, J. G. (1977). *Der goldene Zweig* [The golden bough]. Frankfurt: Ullstein Verlag.
59. Frazer, J. G. (1994). *Collected works* (ed. R. Ackerman). London, England: Curzon.
60. Freitag, B. (1983). *Der Aufbau kindlicher Bewusstseinsstrukturen im gesellschaftlichen Kontext* [Children's reasoning in its social context]. Munich, Germany: Fink Verlag.
61. Freud, S. (1975). *Die Zukunft einer Illusion* [The future of an illusion]. In S. Freud, *Gesammelte Werke*. Frankfurt: Fischer.
62. Fustel de Coulanges, N. D. (1956). *The ancient city*. New York: Anchor books.

63. Goldman, R. (1964). *Religious thinking from childhood to adolescence*. London.
64. Greenfield, P. (1966). On culture and equivalence. In J. Bruner et al. (Eds.), *Studies on cognitive growth*. New York, NY: John Wiley & Sons.
65. Griaule, M. (1975). *Conversations with Ogotommeli. An introduction to Dogon religious ideas*. New York, NY: Oxford University Press.
66. Habermas, J. (1976). *Zur Rekonstruktion des Historischen Materialismus* [Reconstruction of historical materialism]. Frankfurt am Main, Germany: Suhrkamp.
67. Hallpike, C. (1979). *Foundations of primitive thought*. Oxford, England: Clarendon.
68. Hallpike, C. (2004). *The evolution of moral understanding*. London, England: Prometheus Research Group.
69. Harris, P. L., E. Brown, S. Whittal & S. Harmer (1991). Monsters, ghosts, and witches: Testing the limits of the fantasy-reality distinction in young children. *British Journal of Developmental Psychology*, 9, 105-123.
70. Havighurst, R. & B. Neugarten (1955). *American Indian and white children*. Chicago, Ill.: University Press.
71. Heiler, F. (1969). *Das Gebet. Eine religionsgeschichtliche und religionspsychologische Untersuchung* [The prayer]. München/Basel: Ernst Reinhardt Verlag.
72. Henle, M. (1962). On the relation between logic and thinking. *Psychological Review*, 69, 366-378.
73. Huizinga, J. (1987). *Homo ludens*. Reinbek: Rowohlt.
74. Hyde, K. (1990). *Religion in childhood and adolescence. A comprehensive review of the research*. Birmingham, Alabama: Religious Education Press.
75. Ibarra, L. (2007). *Creencias, mitos y rituales en el mundo prehispánico. Una explicación desde la teoría histórico-genética* [Beliefs, myths, and rituals in the Pre-spanish World]. Guadalajara: Universidad de Guadalajara.
76. Irvine, S. H., & Berry, J. W. (Eds.). (1988). *Human abilities and cultural context* (2 vols.). Cambridge, England: Cambridge University Press.
77. Jaensch, E. R. (1923). Die Völkerkunde und der eidetische Tatsachenkreis [Ethnology and eidetic phenomena]. *Zeitschrift für Psychologie und Physiologie der Sinnesorgane* 91, 88-111.
78. Jahoda, G. (1958a). Child animism: I. A critical survey of cross-cultural research. *Journal of Social Psychology*, 47, 197-212.
79. Jahoda, G. (1958b). Child animism: II. A study in West Africa. *Journal of Social Psychology*, 47, 213-222.
80. Jahoda, G. (1958c). Immanent Justice among western African children. *Journal of social psychology*, 47, 241-248.
81. Jahoda, G. (1999). *Images of savages. Ancient roots of modern prejudice in western culture*. London, New York: Routledge.
82. Jahoda, G. (2000). Piaget and Lévy-Bruhl. *History of Psychology*, 3(3), 218-238.
83. Jensen, A.E. (1992). *Mythos und Kult bei Naturvölkern* [Myth and cult among nature peoples]. München: DTV.
84. Kaufmann, E. (1958). *Die Erfolgshaftung*. Frankfurt am Main: Klostermann.
85. Kälble, H. (1997). *Die Entwicklung der Kausalität im Kulturvergleich* [Causality across cultures]. Opladen: Westdeutscher Verlag.
86. Kearney, G. E., De Lacey, P. R., & Davidson, G. R. (Eds.) (1973). *The psychology of aboriginal Australians*. New York, NY: Wiley.
87. Keegan, J. (1993). *A History of Warfare*. New York: Knopf.
88. Keeley, L. H. (1996). *War Before Civilization*. New York: Oxford University Press.
89. Keil, F. (1986). The acquisition of natural kinds and artefact terms. In J. Demopoulos & W. A. Marras (Eds.), *Language learning and concept acquisition*. Norwood, New Jersey: Ablex.
90. Kelly, M. R. (1971). Some aspects of conservation of quantity and length in Papua and New Guinea in relation to language, sex, and years at school. *Territory of Papua and New Guinea Journal of Education*, 7, 1, 55-60.
91. Kelly, M. R. (1977). Papua New Guinea and Piaget: An eight year study. In P. Dasen (Ed.), *Piagetian cross-cultural psychology* (pp. 169-202). New York, NY: Gardner Press.
92. Kern, F. (1952). *Recht und Verfassung im Mittelalter*. Darmstadt: Wissenschaftliche Buchgesellschaft.

93. Kohlberg, L. & C. Gilligan (1971). The adolescent as a philosopher: The discovery of the self in a postconventional world. *Daedalus*, 100, 1051-1086.
94. Kohlberg, L. (1968). Early education. A cognitive developmental view. *Child Development*, 39, 1013-1062.
95. Kohlberg, L. (1974). *Studien zur kognitiven Entwicklung* [Studies on cognitive growth]. Frankfurt am Main, Germany: Suhrkamp
96. Kutzner, M. (2008). Kognitive Strukturen und mentale Entwicklung in vormodernen Gesellschaften [Cognitions and mental development across premodern societies]. In Oesterdiekhoff, G. W. & H. Rindermann (Hrsg.), *Kultur und Kognition* (pp. 79-92). Hamburg, Münster: Lit-Verlag.
97. Laqueur, W. (2006). *Die letzten Tage von Europa*. Berlin: Propyläen (English version: The last days of Europe).
98. Langer, J. (1988). A note on the comparative psychology of mental development. In S. Strauss (Ed.), *Ontogeny, phylogeny, and historical development* (pp. 68-85). Norwood, NJ: Ablex.
99. Laurendeau-Bendavid, M. (1977). Culture, schooling, and cognitive development: A comparative study of children in French Canada and Rwanda. In P. Dasen (Ed.), *Piagetian psychology* (pp. 123-168). New York, NY: Gardner Press.
100. Lehner, S. (1911). Bukaua. In R. Neuhauss (Hrsg.), *Deutsch Neu-Guinea*. Bd. 3 (pp. 397-488). Berlin: Reimer Verlag.
101. LePan, D. (1989). *The cognitive revolution in Western culture*. London: The Macmillan Press.
102. LeRoy, A. (1911). *Die Religion der Naturvölker* [Religion among savages]. Rixheim: Sutter Verlag.
103. Leuba, J. (1916). *The belief in god and immortality*. Boston: Sherman, French & Co.
104. Levi-Strauss, C. (1958). *Anthropologie structurale*. Paris: Librairie Plon.
105. Lévy-Bruhl, L. (1923). *Primitive mentality*. New York: Macmillan.
106. Lévy-Bruhl, L. (1931). *Le surnaturel et la nature dans lan mentalité primitive*. Paris: Alcan.
107. Lévy-Bruhl, L. (1938). *L'expérience mystique et les symboles chez les primitives*. Paris : Alcan.
108. Lévy-Bruhl, L. (1949). *Les carnets de L. Lévy-Bruhl*. Paris: Presses universitaires de France.
109. Lévy-Bruhl, L. (1971). *The 'soul' of the primitive*. Chicago, Ill.: Henri Regnery.
110. Lévy-Bruhl, L. (1983). *Primitive mythology*. St. Lucia, New York, London: The University of Queensland Press.
111. Lévy-Bruhl, L. (1985). *How natives think*. Princeton, NJ: University Press.
112. Loomba, R. M. (1970). The concept of god in children of six to eleven. *Psychological Researches*, 5.
113. Lourenco, O. & A. Machado (1996). In defense of Piaget's theory. A reply to 10 common criticisms. *Psychological Review*, 103, 1, 143-164.
114. Luck, G. (1990). *Magie und andere Geheimlehren in der Antike* [Magic in ancient times]. Stuttgart: Kröner Verlag.
115. Luria, A. R. & L. S. Vygotski (1992). *Ape, primitive man, and child*. Orlando, Florida: Deutsch Press.
116. Luria, A. R. (1982). *Cognitive development. Its cultural and social foundations*. Harvard, MA: University Press.
117. Mair, L. (1969). *Magie im schwarzen Erdteil* [Magic in Africa]. München: Kindler Verlag.
118. Maistriaux, R. (1955). La sous-évolution des noirs d'Afrique. Sa nature, ses causes, ses remèdes. *Revue de Psychologie des Peuples*, 10, 397-455.
119. Malinowski, B. (1996). Die Rolle des Mythos im Leben [The role of myth in life]. In Karl Kerényi (Ed.), *Die Eröffnung des Zugangs zum Mythos* (pp. 177-213), Darmstadt: Wissenschaftliche Buchgesellschaft.
120. Maynard, E. (2008). What we thought we knew and how we came to know it: Four decades of cross-cultural research from a Piagetian point of view. *Human Development*, 51, 56-65.
121. Mbiti, J. (1970). *African religions and philosophy*. Doubleday.

122. Middleton, J. (1999). *Lugbara religion*. Hamburg, Münster: Lit-Verlag.
123. Mogdil, C. & S. Mogdil. (1976). *Piagetian research*. 8 vols. London, England: INFR.
124. Müller, K. E. (2004). *Der sechste Sinn. Ethnologische Studien zu Phänomenen der außersinnlichen Wahrnehmung* [The sixth sense]. Bielefeld: Transcript Verlag.
125. Müller, U. (1982). *Die Entwicklung des Denkens* [The development of thought]. Darmstadt, Germany.
126. Murphy, J. (1927). *Primitive man*. London: Oxford University Press.
127. Nurcombe, B. (1973). Precausal and paracausal thinking. In G. E. Kearney et al. (Eds.), *The psychology of aboriginal Australians* (pp. 105-124). New York, NY: Wiley.
128. Oesterdiekhoff, G. W. (1993). *Die Rolle des Bevölkerungswachstums in der sozialökonomischen Entwicklung* [The role of population growth in the socioeconomic development]. Kiel: Wissenschaftsverlag Vauk.
129. Oesterdiekhoff, G. W. (1997). *Kulturelle Bedingungen kognitiver Entwicklung. Der strukturalgenetische Ansatz in der Soziologie* [Cultural conditions of cognitive growth]. Frankfurt am Main: Suhrkamp.
130. Oesterdiekhoff, G. W. (2000). *Zivilisation und Stukturgenese. Jean Piaget und Norbert Elias im Vergleich* [Civilization and structural genesis]. Frankfurt am Main: Suhrkamp.
131. Oesterdiekhoff, G. W. (2005). *Entwicklung der Weltgesellschaft. Von der Steinzeit zur Moderne*. [Development of world society. From stone ages to the modern world]. Hamburg, Münster: Lit-Verlag.
132. Oesterdiekhoff, G. W. (2006). *Archaische Kultur und moderne Zivilisation* [Archaic culture and modern civilization]. Hamburg, Münster: Lit-Verlag.
133. Oesterdiekhoff, G. W. (2007). Ancient sun cults: Understanding religious rites in terms of developmental psychology. *Mankind Quarterly*, 48(1), 99-116.
134. Oesterdiekhoff, G. W. (2009a). *Mental growth of humankind in history*. Norderstedt, Germany Bod.
135. Oesterdiekhoff, G. W. (2009b). The arena games in the Roman Empire. A contribution to the explanation of the history of morals and humanity. *Croatian Journal of Ethnology* (Nar. Umjet.), 46(1), 177-202.
136. Oesterdiekhoff, G. W. (2009c). Trials against animals. A contribution to the developmental theory of mind and rationality. In *The Mankind Quarterly*, spring / summer, 46, 3 & 4, 346-380.
137. Oesterdiekhoff, G. W. (2011). *The steps of man towards civilization. The key to disclose the riddle of history*. Norderstedt, Germany: Bod.
138. Oesterdiekhoff, G. W. (2012a). *Die geistige Entwicklung der Menschheit* [Mental development of humankind]. Weilerswist, Germany: Velbrück.
139. Oesterdiekhoff, G. W. (2012b). Ontogeny and history. The leading theories reconsidered. *Cultural-Historical Psychology*, 3, 60-69.
140. Oesterdiekhoff, G. W. (2012c). Was pre-modern man a child? The quintessence of the psychometric and developmental approaches. *Intelligence. A Multidisciplinary Journal*, 40, 470-478.
141. Oesterdiekhoff, G. W. (2013a). *Die Entwicklung der Menschheit von der Kindheitsphase zur Erwachsenenreife* [The development of humankind from childhood to adulthood]. Wiesbaden, Germany: Springer Verlag.
142. Oesterdiekhoff, G. W. (2013b). The role of Piagetian cross-cultural psychology to humanities and social sciences. *American Journal of Psychology* 126, 4, 477-492.
143. Oesterdiekhoff, G. W. (2014a). The rise of modern, industrial society. The cognitive-developmental approach as key to disclose the most fascinating riddle in history. *The Mankind Quarterly*, 54, 3 & 4, 262-312.
144. Oesterdiekhoff, G. W. (2014b) Can childlike humans build up and maintain a modern, industrial society? *The Mankind Quarterly*, 54, 3 u. 4, 371-385
145. Oesterdiekhoff, G. W. (2014c). Evolution of law and justice from ancient to modern times. *Journal on European History of Law*, 5(1), 54-64.
146. Oesterdiekhoff, G. W. (2014d). Psychological stage development and societal evolution. A completely new foundation to the interrelationship between psychology and sociology. *Cultura. International Journal of Philosophy of Culture and Axiology*, 11(1), 165-192.
147. Oesterdiekhoff, G. W. (2014e). The role of developmental psychology to understanding

history, culture, and social change. *Journal of Social Sciences*, 10, 4, pp. 185-195.

148. Oesterdiekhoff, G. W. (2015a). *Denkschrift zur Gründung eines Max-Planck-Instituts für Humanwissenschaften*. [Memorandum to the foundation of the Max-Planck-Institute for humanities]. Hamburg, Münster, Germany: Lit-Verlag.

149. Oesterdiekhoff, G. W. (2015b). *Psyche und Gesellschaft in der Entwicklung* [Psyche and society in development]. Hamburg, Münster: Lit-Verlag.

150. Oesterdiekhoff, G. W. (2015c). The nature of pre-modern mind. Tylor, Frazer, Lévy-Bruhl, Evans-Pritchard, Piaget and beyond. *Anthropos*, 110, 1, 15-25.

151. Oesterdiekhoff, G. W. (2015d) Why premodern humans believed in the divine status of their parents and ancestors? Psychology illuminates the foundations of ancestor worship *Anthropos* 110, 2, 582-589.

152. Oesterdiekhoff, G. W. (2015e). Karl von den Steinens analysis of the Brazilian Indian's mind and worldview reconstructed. A contribution to the interrelationship of ethnology and developmental psychology. *The Mankind Quarterly* 56, 1, 30-50.

153. Oesterdiekhoff, G. W. (2015f). Evolution of democracy. Psychological stages and political developments in world history. *Cultura. International Journal of Philosophy and Axiology*, Vol. XII, No. 2, 81-102.

154. Oesterdiekhoff, G. W. (2015g). Interrelations between the brain, psychological stage development, and societal evolution. *Anthropological Notebooks*, 21, 1, 5-21.

155. Oesterdiekhoff, G. W. (2016a). Psychological development, violence, and the trend of pacification in world history. *European Journal of Psychological Studies*, Vol. 7, 1, 29-45.

156. Oesterdiekhoff, G. W. (2016b). Sociological functionalism or developmental psychology as theoretical foundation to ethnology? Radcliffe-Brown's analysis of the Andaman islanders' religious beliefs revised. *International Journal of Anthropology*, 31, (1-2), 61-77.

157. Oesterdiekhoff, G. W. (2016c). Cognitive modules or evolutionary stages? The discussion about the relationship between developmental and cross-cultural psychology. *Human Evolution*, 31, (1-2), 69-83.

158. Oesterdiekhoff, G. W. (2016d). Is a forgotten subject central to the future development of sciences? Jean Piaget on the interrelationship between ontogeny and history. *Personality and Individual Differences*, 98, 118-126.

159. Oesterdiekhoff, G. W. (2016e). Magical causation of death in archaic societies. Cultural anthropology in the light of the cognitive-developmental approach, exemplified by the scrutiny of causes and consequences of the mystical interpretation of the death. *Anthropos*, 111, 1, 224-238.

160. Oesterdiekhoff, G. W. (2016f). Child and ancient man. How to define their commonalities and differences. *American Journal of Psychology*, 129, 3, 297-314.

161. Oesterdiekhoff, G. W. (2016g). The origins of world war I and II. The contribution of the cognitive-developmental approach to the explanation of the 20th century's catastrophe. *Russian Journal of Sociology*, vol. 3, 1, 20-34.

162. Oesterdiekhoff, G. W. (2016h). Progress in mind and consciousness. Psychological stage development and the history of philosophy. *European Journal of philosophical research*, 6, 2, 91-105.

163. Oesterdiekhoff, G. W. (forthcoming) (2016i). Theorie des Mythos (*Anthropos* 111, 2, 2016).

164. Oesterdiekhoff, G. W. (forthcoming) (2016j). What went wrong in cross-cultural psychology over the past 40 years? The developmental approach in opposition to two main ideologies of our time, cultural relativism and universalism of mind.

165. Oesterdiekhoff, G. W. (forthcoming) (2016k). Uneven psychological development across the globe. Development of mentality, politics, law, and social affairs during the past century.

166. Oesterdiekhoff, G. W. (forthcoming) (2016l). Evolution of morals in world history.

167. Oesterdiekhoff, G. W. (2016m). Reichskristallnacht 2.0. New Year's Eve 2015, Cologne. The contribution of the cognitive-developmental approach to the explanation of the Arabian migrants' delinquency. *Russian Journal of Sociology*, vol. 3, 3.

168. Oesterdiekhoff, G. W. (forthcoming) (2017). *Traumzeit der Menschheit* [Dreamtime of humankind. Nature and origins of religion].

169. Oesterdiekhoff, G. W. (with H. Rindermann). (2007). The spread of AIDS in developing countries. A psycho-cultural approach. *Journal of Social, Political, and Economic Studies*, 32(2), 201-222.

170. Oesterdiekhoff, G. W. (with H. Rindermann). (Eds.) (2008). *Kultur und Kognition*. Hamburg, Münster: Lit-Verlag.
171. Peluffo, N. (1962). Les notions de conservation et de causalité chez les enfants provenant de différents milieux physiques et socioculturels. *Archives de psychologie*, 38, 275-291.
172. Peluffo, N. (1967). Culture and cognitive problems. *International Journal of Psychology*, vol. II, No. III, 187-198.
173. Philp, H. & M. Kelly (1974). Product and process in cognitive development. *British Journal of Educational Psychology*, 44, 248-265.
174. Piaget, J. & B. Inhelder (1941). *Le développement des quantités physiques chez l'enfant*. Neuchâtel, Switzerland: Delachaux & Niestle.
175. Piaget, J., & Inhelder, B. (1958). *The growth of logical thinking from childhood to adolescence*. New York, NY: Basic Books.
176. Piaget, J. & B. Inhelder (1969). *The psychology of the child*. New York, NY: Basic Books.
177. Piaget, J. & B. Inhelder (1975). *The origin of the idea of chance in children*. New York, NY: W. W. Norton.
178. Piaget, J. & R. Garcia (1989). *Psychogenesis and the history of sciences*. New York, NY: Columbia University Press.
179. Piaget, J. (1932). *The moral judgment of the child*. New York, NY: The Free Press.
180. Piaget, J. (1959a). *Judgment and reasoning in the child*. New York, NY: Littlefield, Adams & Co.
181. Piaget, J. (1959b). *The child's conception of the world*. New York, NY: Littlefield, Adams.
182. Piaget, J. (1969). *The child's conception of physical causality*. Totowa, New Jersey: Littlefield, Adams & Co.
183. Piaget, J. (1975). *Gesammelte Werke*. Ten volumes [Collected works]. Stuttgart, Germany: Klett Verlag (vol. 8-10: Original: Piaget, J. (1950): Introduction à l'épistémologie génétique. Vol. 1: La pensée mathématique, vol. 2: La pensée physique, vol. 3: La pensée biologique, la pensée psychologique, la pensée sociologique. Paris: Presses universitaires de France).
184. Piaget, J. (1976). *The science of education and the psychology of the child*. New York, NY: Penguin books.
185. Pinker, S. (2011). *The better angels of our nature*. New York, NY: Penguin Books.
186. Ponzio, E. (1966): Acculturazione e detribalizzazione. *Rivista de psicologia sociale*, 13, 41-107.
187. Porter, R. (2000). *The creation of the modern world*. New York: Norton & Company.
188. Porteus, S. D. (1937). *Primitive intelligence*. New York, NY: Macmillan.
189. Prentice, N., Manosevitz, M. & L. Hubbs (1978). Imaginary figures of early childhood: Santa Claus, Easter Bunny, and the Tooth Fairy. *American Journal of Orthopsychiatry*, 48, 4, 618-628.
190. Prince, J. R. (1968). The effect of Western education on science conceptualization in New Guinea. *British Journal of Educational Psychology*, 68, 64-74.
191. Radding, C. M. (1985). *A world made by men. Cognition and society 400-1200*. Chapel Hill: The University of North Carolina Press.
192. Raven, J., Raven, J. C., & Court, J. H. (1993). *Manual for Raven's progressive matrices and vocabulary scales*. Oxford, England: Oxford Psychologist's Press.
193. Rindermann, H., Falkenhayn, L., & Baumeister, A. E. E. (2014). Cognitive ability and epistemic rationality. A study in Nigeria and Germany. *Intelligence*, 47, 23-33.
194. Romanes, G. (1888). *Mental evolution in man*. London, England: Kegan, Trench & Co.
195. Rosenberg, S. et al. (1988). *Political reasoning and cognition. A Piagetian view*. Durham & London: Duke University Press.
196. Rosengren, K. S., Johnson, C. N. & P. L. Harris (Eds.) (2000). *Imagining the impossible*. London, England: Cambridge University Press.
197. Schneider, H. (1909). *Kultur und Denken der alten Ägypter* [Culture and thought of the ancient Egyptians]. Leipzig, Germany: Heinrich'sche Buchhandlung.

198. Schröder, E. (1989). *Vom konkreten zum formalen Denken* [From concrete to formal operational thought]. Bern, Switzerland: Huber.
199. Schröder, E. & W. Edelstein (2001). The impact of developmental change and social constraints on cognition. The example of syllogistic reasoning. In A. Tryphon & J. Vonèche (Eds.), *Working with Piaget. Essays in honor of B. Inhelder* (pp. 103-122). Hove, England: Psychology Press.
200. Schultze, F. (1900). *Psychologie der Naturvölker* [Psychology of the savages]. Leipzig, Germany: Von Veit & Comp.
201. Scott, J. P., Fredericson, E., & Fuller, J. L. (1951). Experimental exploration of the critical period hypothesis. *Personality*, 1, 162-183.
202. Segall, M. H., P. Dasen, J. Berry & Y. Poortinga (1990). *Human behavior in global perspective*. MA, Needham Heights: Allyn and Bacon.
203. Selman, R. (1980). *The growth of interpersonal understanding*. New York: Academic Press.
204. Shweder, R. A. (1982). On savages and other children. *American Anthropologist*, 84, 2, 354-366.
205. Signer, D. (2004). *Die Ökonomie der Hexerei* [Witchcraft]. Wuppertal: Hammer Verlag.
206. Soldan, W.G. & H. Hepe (1986). *Geschichte der Hexenprozesse* [History of trials against witches]. Kettwig: Magnus Verlag.
207. Staewen, C. (1990). *Kulturelle und psychologische Bedingungen der Zusammenarbeit mit Schwarzafrikanern* [Cultural and psychological conditions of cooperation with Black Africans]. München: Weltforum Verlag.
208. Steinen, K. von (1894). *Unter den Naturvölkern Zentral-Brasiliens* [Among savages in Brazil]. Berlin: Reimer Verlag.
209. Stern, W. (1924). *Psychology of early childhood up to the sixth year of age*. New York, NY: Holt.
210. Sternberg, R. J. (1984). A contextualist view of the nature of intelligence. *International Journal of Psychology*, 19, 307-334.
211. Strauss, S. (Ed.) (1988). *Ontogeny, phylogeny, and historical development*. Norwood, NJ: Ablex.
212. Subbotsky, E. (2011). The ghost in the machine: Why and how the belief in magic survives in the rational mind. *Human Development*, 54, 126-143.
213. Subbotsky, E. V. & E. Slater (2011). Children's discrimination of fantastic versus realistic visual displays after watching a film with magical content. *Perceptual and motor skills*, 112, 603-609.
214. Tapp, J. & Kohlberg, L. (1971). Developing senses of law and legal justice. *Journal of Social Issues* 27(2).
215. Thomas, K. (1980). *Religion and the decline of magic*. 2 vols. London: Penguin Books.
216. Thorndike, L. (1923-1946). *History of magic and experimental science in Europe*. Six vols. New York: Columbia University Press.
217. Thun, T. (1959). *Die Religion des Kindes* [Religion in the child]. Stuttgart: Klett.
218. Tulviste, P. (1979). On the origins of theoretic syllogistic reasoning in culture and the child. *Quarterly Newsletter of the Laboratory of Comparative Human Cognition*, 1, 73-80.
219. Tylor, E. (1871). *Primitive culture*. Two vols. London: J. Murray.
220. Ulfkotte, U. (2016). *Grenzenlos kriminell. Was uns Politik und Massenmedien über die Straftaten von Migranten verschweigen* [Criminal unlimited]. Rottenburg: Kopp Verlag.
221. Vernon, P. E. (1969). *Intelligence and cultural environment*. London: Methuen & Co.
222. Vierkandt, A. (1978). Die entwicklungspsychologische Theorie der Zauberei [Developmental psychology of magic]. In L. Petzold (Hrsg.), *Magie und Religion*, (pp. 146-222). Darmstadt: Wissenschaftliche Buchgesellschaft.
223. Volhard, E. (1939). *Kannibalismus*. Stuttgart: Strecker und Schroeder.
224. Vujk, R. (1981). *Overview and critique of Piaget's genetic epistemology 1965-1980*. Two vols. London, England: Academic Press.
225. Waddell, V. (1968). *Some cultural considerations on the development of the concept of conservation*. Sydney, Australia: Australian National University.

226. Wallon, H. (1928). La mentalité primitive et celle de l'enfant. *Revue Philosophique*, 105, 82-105.
227. Were, K. (1968). *A survey of the thought processes of New Guinean secondary students*. Adelaide, Australia: University of Adelaide.
228. Werner, H. (1948). *Comparative psychology of mental development*. New York, NY: Follet.
229. Werner, H., & Kaplan, B. (1948). The developmental approach to cognition: Its relevance to the psychological interpretation of anthropological and ethnolinguistic data. *American Anthropologist*, 58, 866-880.
230. Wundt, W. (1910). *Sprache, Mythus und Sitte*. [Language, myth, and lore]. 4. Band, 1. Teil der Völkerpsychologie. Leipzig: W. Engelmann.
231. Wundt, W. (1914). *Sprache, Mythus und Sitte*. 5. Band, 2. Teil der Völkerpsychologie. Leipzig: W. Engelmann.
232. Wuttke, A. (1860). *Der deutsche Volksaberglaube der Gegenwart* [Current superstitions in Germany]. Hamburg.
233. Ye'or, Bat (2005). *Eurabia. The Euro-Arab axis*. Teaneck, Madison: Fairleigh Dickinson University Press.
234. Zeininger, K. (1929). *Magische Geisteshaltung im Kindesalter und ihre Bedeutung für die religiöse Entwicklung* [Magic and religion in children]. Leipzig: J. A. Barth.
235. Ziegler, J. (1968). *Sociologie et contestation. Essai sur la société mythique*. Paris: Gallimard.