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Current Views of European Anthropologists on Race: Influence of Educational and Ideological Background

ABSTRACT Significant differences in views on race (once a core anthropological concept) occur between scientists from different countries. In light of the ongoing race debate, we present the concept's current status in Europe. On three occasions in 2002–03, we surveyed European anthropologists' opinions toward the biological race concept. The participants were asked whether they agreed that there are biological races within the species *Homo sapiens*. A dependence was sought between the type of response and several factors. Three of these factors—country of academic education, discipline, and age—were found to be significant in differentiating the replies. Respondents educated in Western Europe, physical anthropologists, and middle-aged persons reject race more frequently than respondents educated in Eastern Europe, people in other branches of science, and those from both younger and older generations. The survey shows that the views of anthropologists on race are sociopolitically (ideologically) influenced and highly dependent on education. [Keywords: human races, race concept, physical anthropology, Europe]

Races, as natural divisions of the human species, are rather like angles. Many people believe in them, devoutly. They can even tell you what properties they have. But the closer you try to examine them to discover their real nature, the more elusive they become.

—Jonathan Marks, 2006

VARIOUS aspects of the race concept have been fervently debated since the inception of physical anthropology as a separate discipline, some three centuries ago (e.g., Banton 1987; Brace 2005; Graves 2001; Hutchinson 2005; Kohn 1995; Marks 1995; Montagu 1964; Stepan 1982; Stocking 1968; Wolpoff and Caspari 1997). Although the emphasis has frequently shifted during this time, the major issues in question in the past were the number of human races, classifications of races, the origin of races, and racial equality or inequality (Biondi and Rickards 2002; Caspari 2003; Lieberman et al. 1999). To begin with, and for a long time, research on race was based on the ethnogeographic and typological (essentialist) approach. Some 19th-century anthropologists erroneously identified the notion of the “ethnic group” (distinguished on the basis of linguistic and cultural community) with that of race. Racial

typology (assigning human individuals into discrete racial types) spread at the very beginning of the 19th century and dominated the study of human variation up to the second half of the 20th century (e.g., Deniker 1900; Wierciński 1962).

By the mid-20th century, with the formulation of a synthetic theory of evolution and as a result of subspecific taxa being brought into question (Wilson and Brown 1953), the debate on race had taken on a completely different dimension, with new concepts emerging. On one side were those who argued for the demise of the concept, claiming that it was of little use in the study of human variation and, further, was burdened with negative sociopolitical implications (e.g., Livingstone 1962; Montagu 1942, 1964). On the other side were those who thought the concept should not be abandoned but, instead, redefined in terms of populational thinking, such that races would indicate breeding populations and genetically open systems (e.g., Dobzhansky 1962; Garn 1961). This led to a lengthy debate on the value of the race concept, the status of which, despite recent illuminating contributions from the field of genetics (e.g., Bamshad et al. 2003; Brown and Armelagos 2001; Lewontin

1972; Rosenberg et al. 2002; Templeton 1998, 2002, 2005), still varies (Lieberman et al. 2004).

Moreover, the debate on race is not only ongoing in anthropology but also has recently extended to other branches of science such as biomedical research (see, e.g., Burchard et al. 2003; Cooper et al. 2003; Feldman et al. 2003). Advances in human genome research brought about an increasing number of discoveries of mutated alleles responsible for various metabolic changes, whereas the frequency of these alleles has displayed interpopulational differences. If there were differences between the “white” and “black” U.S. residents—for example, alleles of genes called *PCSK9* (Cohen et al. 2006) or *ApoE4* associated with LDL metabolism and indirectly the risk of heart disease—they were easy to label as “racial” differences (Burchard et al. 2003). Similar justifications, in racial terms, were offered for differences between whites and Asians—for example, with reference to alleles of gene *UGT1A1*, which controls the metabolism of a colon-cancer drug, irinotecan. Proponents of biological races, without any definition of the term or its scope, were ready to treat as races Afro-Americans, Japanese, and Hispanics (Garcia 2004). In that the argument proposed that knowledge of the frequency of alleles in individual distinguishable populations was of practical importance in the treatment of some diseases, it was quite correct, although this still did not make a population a race (Hoffman 2005). Thus, interpopulational diversity of the contents of the human genome discovered during the research is not an argument for the existence of races but merely for polymorphism, the range and determinants of which are worth investigating also for medical purposes (Jones 2001; Rotman 2005; Schwartz 2001).

A number of surveys have been carried out to determine the status of the biological race concept among certain groups of scientists (Cartmill 1998; Kaszycka and Štrkalj 2002; Kaszycka and Strzałko 2003a, 2003b; Lieberman and Reynolds 1978, 1996; Lieberman et al. 1983, 1989, 1992, 2003b; Littlefield et al. 1982; Štrkalj et al. 2004). It has been established that, among those anthropologists who have been most closely investigated, there is little agreement on the subject. In some countries—for example, the United States—the concept has been rejected by the majority (70–80 percent) of anthropologists, both physical and cultural; in others—such as Poland—a sizeable proportion (25 percent) of physical anthropologists have rejected race; whereas in yet others—for example, China—the concept remains firmly entrenched. It has been suggested that the reasons for this disagreement form a complicated network of various external and internal factors.

Among the external influences, sociopolitical and cultural elements seem to be important. The long and controversial history of racial studies has provided many examples of this. For instance, as the United States has experienced a long history of slavery, racism, and discrimination, it has become particularly sensitive to race. Moreover, the term *race* itself has gained strongly negative connotations,

and the biological race concept is largely abandoned by the scientific community. Some even assert that “Americans are obsessed with race—or, at any rate, academic Americans are” (Hocutt 2002:115). In China, where the concept of race happens to be exploited for political reasons, as claimed by Qian Wang and colleagues (2002), thinking in “racial” terms is accepted among anthropologists. As Jonathan Marks once remarked: “The pronouncements of scientists on human variation may be as loaded with cultural prejudice as those of anyone else—and as history shows us, indeed they usually have been” (1995:2).

Scientific factors include new linkages of concept and data. These include Frank Livingstone’s (1958) research on clines, which demonstrated that genes are distributed in gradations across the so-called racial boundaries and which led him to express his famous statement: “There are no races, there are only clines” (Livingstone 1962:279). It was also shown that traits, which vary in humans, are distributed in a nonconcordant manner (e.g., Montagu 1964). Richard Lewontin (1972), studying allele frequencies as a measure of diversity, found that most genetic variation is within populations (85 percent) rather than among them. Finally, Alan Templeton (1998), investigating the evolutionary genetics of race, showed that gene flow between populations renders a definition of race based on phylogenetic distinction impossible. The problems of racism led many anthropologists to carefully examine these new data and to recognize that the concept of relatively homogeneous and separate populations lacked both validity and utility.

Previous research (e.g., Lieberman et al. 2004) has demonstrated that there are significant differences in the status of the race concept between different countries of the world. In a continuation of the study of scientists’ attitudes toward race (and factors influencing these), a survey of European anthropologists is presented below. Europe is thought to be particularly interesting in this regard, as for almost half a century the arrangement of forces there was polarized between two groups influenced by differing ideologies. This poses the question, therefore, as to whether the Eastern European (i.e., postsocialist countries of the former Soviet Bloc) view on the biological race concept differs from the Western European view.

One might also expect generational differences in opinions on race where age of the respondents is revealed as a discriminating factor (e.g., Kaszycka and Strzałko 2003a, 2003b; Lieberman and Reynolds 1996). Finally, one may observe that the level of respondent conviction about the “objective” existence of human races can depend on the highest degree earned, institutional affiliation, or educational profile (see Kaszycka and Štrkalj 2002).

MATERIALS AND METHODS

In September 2002, we conducted an international pilot survey that aimed to assess the views of various European

anthropologists toward race (Kaszycka et al. 2003). To accomplish this, a questionnaire was designed and distributed among the members of the European Anthropological Association (EAA) at the Society's 13th biennial congress in Zagreb, Croatia. For that survey, questionnaires were distributed to all people attending one of the plenary sessions, with two of the authors (Kaszycka and Štrkalj) collecting the questionnaires in the lobby. Over a 120 people were polled, with the completion rate being 50 percent (delegates from non-European countries were excluded).

Participants were asked two questions. The phrases were similar to those previously used in the U.S. and Polish studies (e.g., Lieberman et al. 1989; Lieberman and Reynolds 1996; Kaszycka and Štrkalj 2002; Kaszycka and Strzałko 2003a, 2003b):

Question 1: Do you agree with the statement: "There are biological races (meaning subspecies) within the species *Homo sapiens*"?

Question 2: Do you support race in any other of its meanings (i.e., do you believe that human races exist)?

It should be emphasized that members of the EAA are mostly physical anthropologists; the approximate proportion of physical anthropologists to persons of other disciplines being about 80 to 20 percent. In addition, in European countries (and in most universities within those countries), unlike within the United States, physical and cultural anthropology are affiliated with separate departments: the former is part of biological or medical sciences whereas the latter is part of humanities. Therefore, for European physical anthropologists with a biological education, the term *race* implies biological race. Thus, by inquiring in our second question about "race in any other of its meanings," we still were asking about biological races and not "social races" as recognized in the Americas, including the United States (e.g., Harris 1980; Wagley 1968). In determining the status of the race concept among European anthropologists, we were not only interested in the proportion of respondents accepting or rejecting race but also which of the proportion of those who accept race uphold this view in a purely taxonomic sense (as a subspecies). In the past, three essential connotations of human race (besides race as a synonym for subspecies) existed: geographical, typological, and populational.

In May 2003, two follow-up surveys were conducted by Kaszycka to broaden the sample and further elucidate the status of the race concept among European anthropologists. In the first of the new surveys (conducted in Prague, Czech Republic, during the international anthropological congress commemorating the 60th anniversary of the death of Aleš Hrdlička), questionnaires were distributed to 70 people attending the closing ceremony. In addition, over the following few weeks, almost 300 additional persons (members of the European Anthropological Association) were asked to complete the questionnaire via e-mail. The Polish members of the association were excluded from the third

survey so as to avoid overrepresentation of anthropologists from a single country (Polish physical anthropologists had previously been comprehensively surveyed; see Kaszycka and Štrkalj 2002; Kaszycka and Strzałko 2003a, 2003b).

Each time, in addition to the questions on race, respondents were asked whether they had attended the previous congresses (so as to exclude repetition of answers). The completion rate for the Prague survey was similar to that for Zagreb (close to 50 percent), but for the third (e-mail) survey, the completion rate was below 20 percent. In sum, about 50 percent of our respondents were derived from the first survey, about 20 percent from the second, and about 30 percent from the third. In the e-mail survey, we give examples of "other" meanings of race (in Question 2) to ensure the respondents understood that we were asking about other biological meanings of race.

Thus, on the three occasions mentioned above, a total of 125 persons from more than 20 European countries were surveyed. The Eastern European countries included Bulgaria, Croatia, Czech Republic, Hungary, Lithuania, Poland, Russia, Serbia, Slovakia, and Slovenia, whereas the Western European countries included Austria, Belgium, Denmark, England, France, Germany, Greece, Italy, Norway, Spain, Switzerland, and the European part of Turkey.

We sought to find a dependence between type of response and the following biographic or social characteristics (which the respondents were asked to supply anonymously): sex, age, country of academic education, highest degree obtained, institutional affiliation (employer), and educational profile (discipline). Some of these characteristics surveyed in previous research—both U.S. and Polish—had proved to be discriminating factors.

The correlation between response and all of the above-mentioned characteristics were tested using chi-square statistics. Chi-square, however, only tests the independence in pairs of variables and is insufficient when one has more than two associated qualitative variables. Therefore, log-linear analysis (a multivariate extension of chi-square) was employed in addition. Log-linear is a goodness-of-fit test that allows testing of all the effects (main, association, and interaction) between all variables simultaneously. The analysis involved construction of a model, multidimensional contingency tables of expected frequencies, and testing of their goodness-of-fit against the table of actual frequencies. The principal idea is to find a model of interacting variables that best represents the data. For all calculations, the variant "have no opinion" was excluded as not sufficiently numerous for statistical purposes.

RESULTS

Of the 125 respondents, 50 percent agreed that human races exist (answering "yes" for Question 1 or Question 2), 48 percent disagreed (answering "no" for Question 1 and 2), and two percent were undecided (leaving the question unanswered or putting in a question mark). Among those who agreed, 62 percent supported race as subspecies, whereas

TABLE 1. Proportion of Different Views on Race

Response	Total		Sex		Age (yrs.)			Country of education		Degree		Affiliation		Discipline	
	N	%	M	F	21-35	36-55	56-73	Eastern Bloc	Western Bloc	B.A. or M.Sc.	Ph.D. or D.Sc.	Univ.	Other	Phys. anthrop.	Other
Agree	63	50	39	24	18	22	23	42	21	15	48	46	16	39	24
Q1—subspecies	39	31	24	15	9	11	19	26	13	9	30	30	8	23	16
Q2—other	24	19	15	9	9	11	4	16	8	6	18	16	8	16	8
Disagree	60	48	37	23	11	35	14	18	42	9	51	42	15	50	10
Don't know	2	2	0	2	0	1	1	1	1	0	2	1	1	2	0
Total (N)	125	100	76	49	29	58	38	61	64	24	101	89	32	91	34
(%)	100				23	46	30	49	51					73	27

Note: Agreement that "there are biological races within the species *Homo sapiens*" (Q1—race meaning subspecies; Q2—race in other of its meanings) of European anthropologists by sex, age, country of academic education, highest degree obtained, institutional affiliation, and educational profile (discipline).

38 percent supported race in its other meanings. The responses to Question 1 (race as subspecies) and Question 2 (race as other than subspecies but still meaning biological) were not mutually exclusive: a number of respondents answered "yes" for both. Responses were categorized as follows: replies "yes" and "no" (two categories) and replies "yes—subspecies," "yes—other than subspecies," and "no" (three categories).

As previously mentioned, a dependence was sought between the type of response and several biographic or social characteristics (factors). Three of those factors proved significant in differentiating the replies: country of academic education, educational profile (discipline), and age. No relationship between views toward race and sex, highest degree obtained, or institutional affiliation was found. The responses broken down by all the factors are summarized in Table 1.

Country of Academic Education (Western vs. Eastern Bloc)

Because an analysis of responses in respect of country of academic education was not possible (the number of respondents varied from one to 18 per country), we divided the sample into two formerly ideologically different counterparts: Eastern (former Soviet Bloc) countries and Western (pluralistic, liberal, democratic) countries. Based on this division, we found a highly significant disparity in the respondents' views on race: members of the EAA who were educated in Western Europe rejected race twice as often as they accepted it (67 vs. 33 percent), whereas those educated in Eastern Europe accepted race twice as often as they rejected it (70 vs. 30 percent). The correlation between type of response in two categories (i.e., agree, disagree) and country is statistically significant ($\chi^2 = 16.94; p = .00004$), as is the correlation between type of response in three categories (i.e., subspecies, other meaning, disagree) and country ($\chi^2 = 16.94; p = .0002$). Irrespective of where in Europe (Eastern or Western countries) the respondents were from, they chose the subspecies meaning of race more frequently than its other meanings (see Figure 1).

Two exceptions in this general Eastern versus Western "rule" were observed: the findings for Croatia (eight respondents) were inconsistent with the rest of Eastern Bloc countries, in that more respondents in Croatia rejected the race concept; while more respondents from Germany (eight respondents) accepted it, as opposed to the rest of the Western Bloc countries.

Educational Profile (Discipline)

Besides analysis by country of academic education, another approach employed was to examine attitudes toward race relative to educational profile. Because of the small sample of respondents representing branches of science other than physical anthropology (27 vs. 73 percent), they were divided only into two subgroups: physical anthropologists and all other scientists. The latter category was reflected on

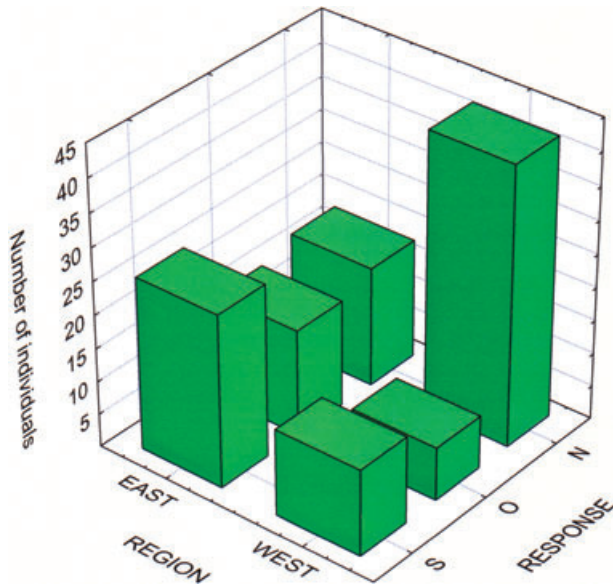


FIGURE 1. Responses (S—subspecies; O—other meaning of race; N—no races) by country of academic education (Eastern and Western Bloc).

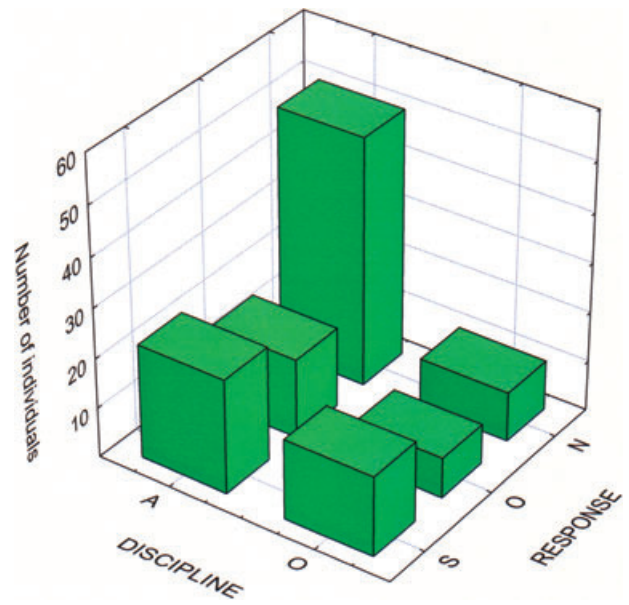


FIGURE 2. Responses (S—subspecies; O—other meaning of race; N—no races) by discipline (A—physical anthropologists; O—other).

the questionnaire as (1) social anthropology (this group size appeared to be negligible) and (2) other related fields of science. Although our questionnaires did not specifically ask for the name of discipline, some respondents who marked “other field” nonetheless stated their educational profile; amongst these were geneticists and a biologist, a biomedical scientist, an archeologist, and a demographer.

There were clear differences in respondents’ views on race with respect to this factor: physical anthropologists rejected race more frequently than they accepted it (56 vs. 44 percent), whereas specialists in other branches of science accepted race more than twice as much as they rejected it (70 vs. 30 percent). The correlation between type of response and educational profile was statistically significant ($\chi^2 = 7.23$; $p = .007$). Irrespective of discipline, the respondents chose the subspecies meaning of race more frequently than its other meanings (see Figure 2).

When we divided the category “other field” (although this sample was already small) into Eastern and Western respondent subgroups, we observed a conspicuous difference in responses (see Figure 3). It was the Eastern European respondents of the other disciplines (half of them being Czech) who influenced the final result: as much as 90 percent of them accepted race, whereas the Western Europeans of the other disciplines accepted and rejected race in almost equal proportion. The correlation between type of response and country in the subgroup “other field” is statistically significant ($\chi^2 = 7.68$; $p = .006$).

Age

Responses in two categories. Based on age, we grouped the respondents into three categories: youngest (21–35 years), middle aged (36–55 years), and oldest (56–73 years). Inter-

estingly, neither did acceptance of race gradually increase with age nor did rejection of race decline gradually with age; instead, it was the middle-aged generation that rejected the race concept to a greater extent. In fact, when taking the combined European sample into account, the 36–55 years age group was the only one that rejected the concept to a greater extent than accepting it (61 vs. 39 percent; see Figure 4). In contrast, both youngest and oldest generations accepted race almost twice as frequently as they rejected it

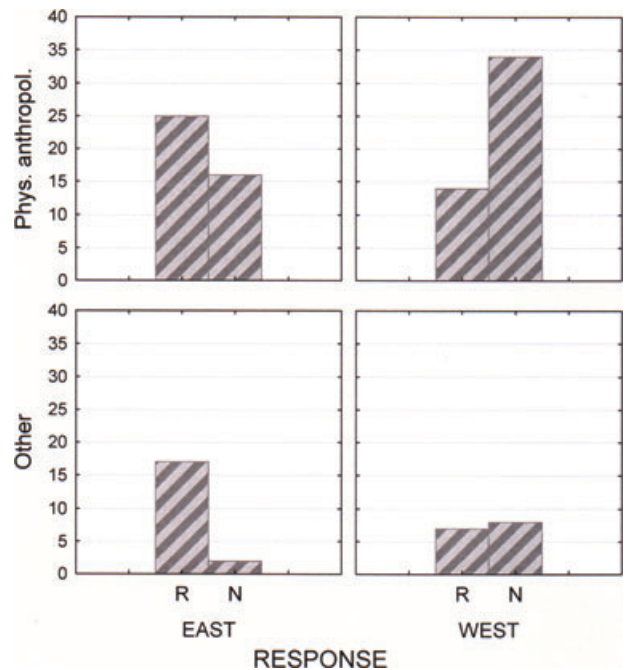


FIGURE 3. Responses in two categories (R—races; N—no races) by country (East and West); upper row—physical anthropologists; bottom row—other.

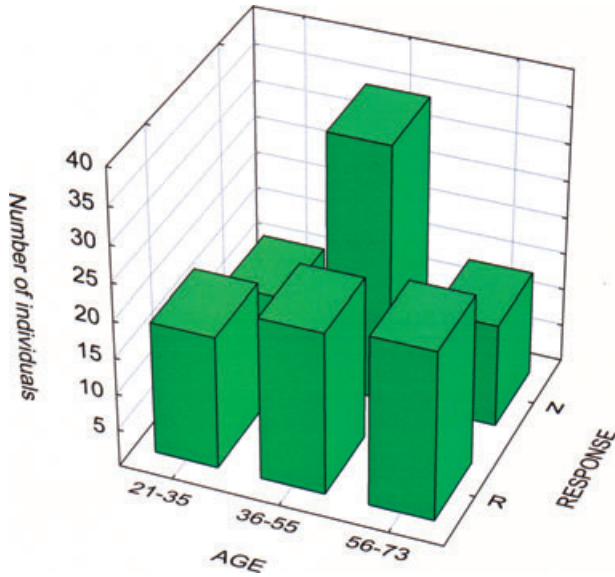


FIGURE 4. Responses in two categories (R—races; N—no races) by age of respondent (youngest, middle aged, and oldest generation).

(38 vs. 62 percent in both cases). Therefore, the median age for both groups was similar: 50 years for those who agreed with race and 47 years for those rejecting race (see Figure 5). The correlation between type of response in the two categories (i.e., agree, disagree) and age is statistically significant ($\chi^2 = 6.84; p = .03$).

When dividing the sample into two subgroups—Eastern and Western Bloc countries—however, one obtains a very different picture (see Figure 6). Most Eastern European anthropologists from the youngest and the oldest generation accept race (almost all of them, by three times as much), whereas those from the middle-aged generation accept and reject race in equal proportion. The correlation between type of response and age in this subgroup is statistically significant ($\chi^2 = 10.59; p = .03$). In contrast to Eastern Europeans, more Western European anthropologists from

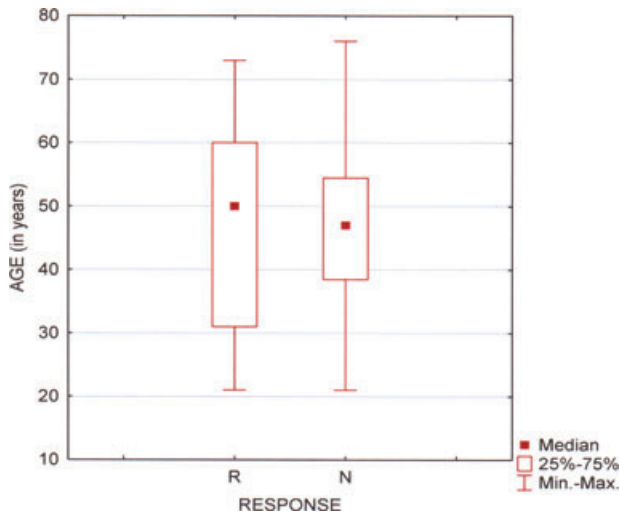


FIGURE 5. Age of respondents (the whole sample) by response (R—races; N—no races).

any generation reject race (about twice as frequently) as they accept it.

Responses in three categories. The oldest generation of European anthropologists selected the “subspecies” meaning of race about five times as frequently as the “other” meaning of race (83 vs. 17 percent). Both the middle-aged and the youngest generation selected the subspecies concept of race with exactly the same frequency (50 percent) as the other meanings of race (see Figure 7). The correlation between type of response in the three categories (i.e., subspecies, other meaning, disagree) and age is statistically significant ($\chi^2 = 13.86; p = .008$).

With the division of the same sample into Eastern and Western subgroups (see Figure 8), no difference between them was found. Both youngest and the middle-aged generations selected the subspecies meaning of race in approximately the same frequency as its other meanings, whereas most of the respondents from the oldest generations more frequently selected the subspecies meaning of race (in the case of Western anthropologists, all respondents; in the case of Eastern anthropologists, 3.5 times as often) over its other meanings.

For the total European sample, the median age of all the respondents accepting the “subspecies” meaning of race was 55 years; the median age for those accepting race in any other of its possible meanings was 46 years (this difference is significant at $p < .05$); and the median age for those rejecting race was 47 years (see Figure 9).

When we divided the whole sample in respect of median age into subgroups of Eastern respondents (see Figure 10a) and Western respondents (see Figure 10b), we obtained an interesting result. The medians of the Eastern subsample are in general agreement with the medians of the whole sample in having the highest value for “subspecies,” lowest for “other meaning of race,” and medium for “no race” (58, 42, 51 years, respectively); for the Western subsample, this finding is completely reversed, insofar as the highest median was found for the “other meaning of race,” whereas both “subspecies” and “no race” had lower median values (50, 45, 45 years, respectively).

Log-Linear Analysis

Log-linear analysis generally confirmed the results described above. In this analysis, we employed four variables: response (R; two categories); age (A; three categories); country (C; two categories), and discipline (D; two categories); thus, the contingency table size was $2 \times 3 \times 2 \times 2$. The best-fit model for the real distribution of frequencies in the contingency table was $\{DR\}\{DCA\}\{CR\}$. This means that significant first-order interactions are held between the variable R “response” and the variable D “discipline” as well as C “country,” and that the result was also affected by a second-order interaction between variables D, C, and A. Essentially, this verifies that when allowing variables to have multiple effects, the outcome yes or no (response) varies significantly by country. The goodness-of-fit was determined by the chi-square value ($\chi^2 = 12.27, p = .20, df = 9$). In log-linear

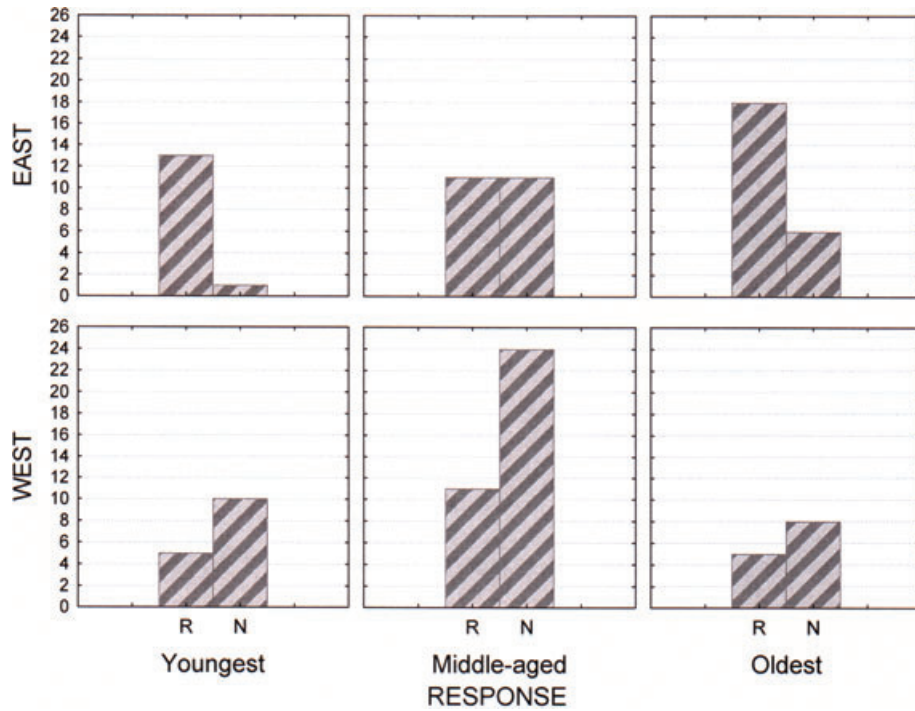


FIGURE 6. Responses in two categories (R—races; N—no races) by age of respondent (youngest, middle aged, and oldest generation); upper row—Eastern Europe; bottom row—Western Europe.

analysis, $p > .05$ means that the best-fit model does not differ significantly from the actual distribution of frequencies.

DISCUSSION

The history of anthropological research in general, and human variation in particular, is as complex and evasive as is European social history. Previous research has demon-

strated that there are significant differences in the status of the biological race concept between different countries of the world (e.g., Lieberman et al. 2004). It has been suggested (Kaszycka and Strzałko 2003a) that reasons for the differences in attitudes toward race should be sought, among others, in the different historical (traditions of anthropological schools), sociopolitical, and professional (educational) contexts in which contemporary physical anthropology developed historically. Other important factors might include semantics, attitude (willingness to supply or avoidance of a response), and chance (drift), especially in the smaller countries.

In this article, we examine a very heterogeneous group of European anthropologists belonging to different national traditions of research, some of which are long-standing whereas others are relatively recently established. Our analyses indicate the persistence of racial thinking among this group of scientists. However, this generally applies to more Eastern European anthropologists than their Western European counterparts, as the 66 percent of the latter who rejected race in 2002–03 is entirely comparable to the 69 percent of physical anthropologists in the United States who rejected race in 1999 (Lieberman et al. 2003a, 2003b).

Sociopolitical and Historical Contexts: Race and Country

In 1945, at the Yalta and Potsdam conferences, the three existing world powers (the United States, England, and the USSR) established new territorial divisions and spheres of

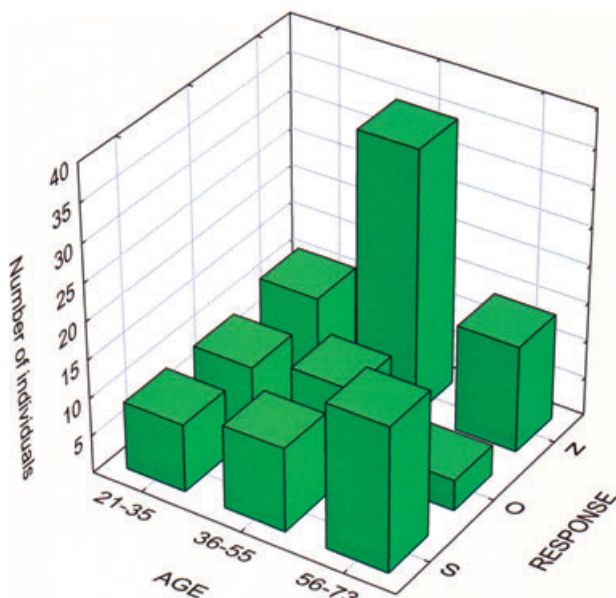


FIGURE 7. Responses in three categories (S—subspecies; O—other meaning of race; N—no races) by age of respondent (youngest, middle aged, and oldest generation).

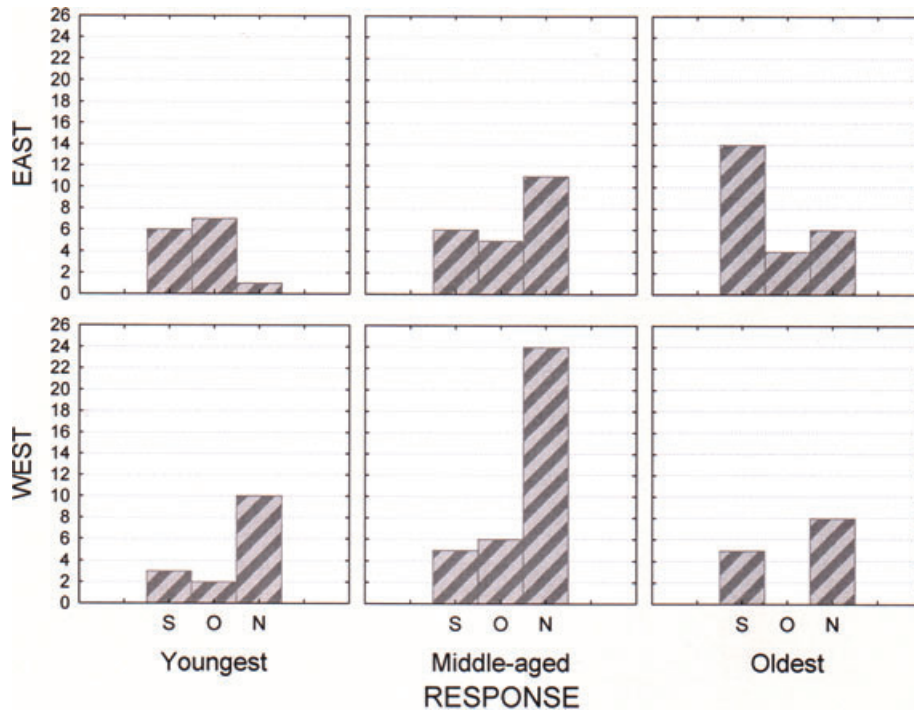


FIGURE 8. Responses in three categories (S—subspecies; O—other meaning of race; N—no races) by age of respondent (youngest, middle aged, and oldest generation); upper row—Eastern Europe; bottom row—Western Europe.

influence on the European continent. Thus, the power balance in Europe and the world became polarized, with the boundary between the two opposing blocs running through a divided Germany.

Western Europe, cooperating with the United States, was swept by a new wave of scientific-technological revolution. The rapid development of genetics contributed to great advances in biological science, including human biology. The disintegration of the colonial empires in the 1950s and 1960s also favored a new perspective on human variability, in respect to both its cultural and biological diversity. Increasingly important was the human rights move-

ment. After the UN General Assembly had passed the Universal Declaration of Human Rights in 1948, the member states of the Council of Europe, established in 1949, signed the European Convention for the Protection of Human Rights in Rome (enacted in 1953). All these events culminated in the assumption of a new meaning for human races in this part of Europe and especially in the United States. A lively discussion among anthropologists ultimately led them to repudiate the racial typology; in time, increasing numbers of anthropologists tended to adopt the opinion that, in the light of the modern biological research, the notion of “race” was altogether impossible to sustain and that there were no such taxonomic units within the human species.

The history of science took a different course, however, in Eastern Europe, within the USSR’s sphere of influence. Here, it was subjected to the politics and ideologies of the dominating power. Because the field of genetics found itself in the group of “ideologically incorrect” sciences, the development of biology suffered a great setback. Lysenkoism—a doctrine promoted by Soviet agriculturalist Trofim Lysenko that was based on the idea that acquired characteristics could be inherited—was until 1956 the only permitted theory of genetics in the USSR and the entire Soviet Bloc. This, of course, led to the suppression of teaching and research of Mendelian genetics. For the same ideological reasons, anthropology, too, had to adopt the Soviet perspective on human variability, which meant de facto acceptance of races in the typological (and not populational) sense. More significantly, it appears that there was no social expectation that would be fulfilled by the notion of the

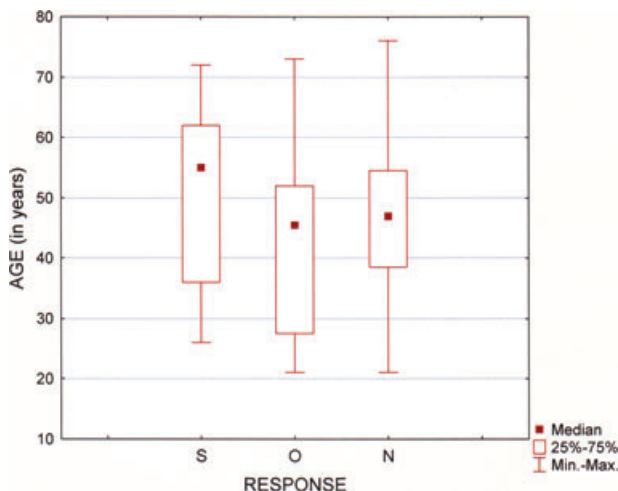


FIGURE 9. Age of respondents (whole sample) by response (S—subspecies; O—other meaning of race; N—no races).

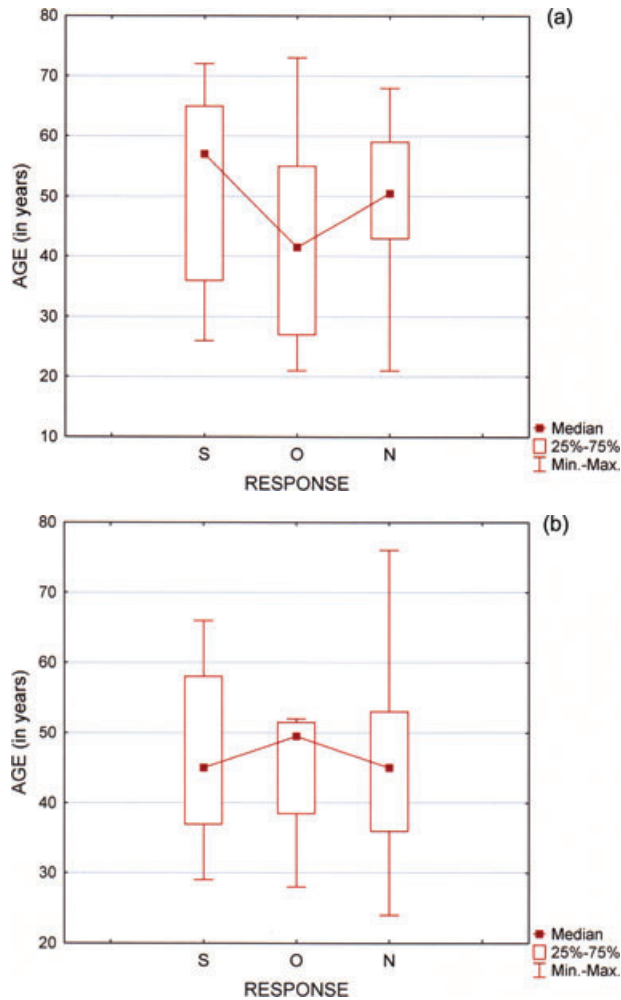


FIGURE 10. a. Age of respondents from Eastern Europe by response (with statistically significant difference between pair 1 [subspecies] and 2 [other meaning of race]); b. Age of respondents from Western Europe by response (S—subspecies; O—other meaning of race; N—no races).

“nonexistence of human races” in communist Europe. Eastern European countries were not burdened by past colonialism, and, moreover, the philosophy of “brotherhood and unity” was officially imposed on citizens and implemented. Both the existence of races and their equality were therefore strongly affirmed in politics and science.

It was only in the 1960s that the United States and West European discourse on the anthropological concept of “race” reached some countries of the Eastern Bloc (e.g., Poland). Naturally, much has changed since then and, since the 1990s, so has almost everything in science. Despite this, however, racial stereotypes have survived in many places of Eastern Europe, and many lecturers teaching anthropology today formulated their views based on the intraspecific variability of humans of the 1960s and 1970s. Detailed surveys of Polish physical anthropologists (Kaszycka and Štrkalj 2002; Kaszycka and Strzałko 2003a) suggest that the only exceptions are those (few) Eastern scientists

who were either educated at or in contact with Western institutions.

Local Traditions of Anthropological Schools

Differing local traditions, however, resist this general tendency. Examples within our sample are Germany (a Western Bloc country in which more respondents support the race concept) and Croatia (an Eastern Bloc country in which more respondents are against the race concept). These two exceptions involve a small group of anthropologists and do not change the generality of the above in any significant way.

The German anthropological school. German physical anthropology has had a long research tradition in which race came to play a very important role in the troubled and turbulent times after the defeat in the First World War (Proctor 1988; Schwidetzky 1992; Spencer 1997). Robert Proctor notes that, “by the 1920s, race had become the single most important concept in German anthropology” (1988:148). The discipline itself would soon transform into *Rassenkunde* (“racial science”) at a time when nationalism and racism started to gain currency in German politics. Interestingly, although new developments in human genetics between the two wars forced some scientists to rethink the value of the race concept, these had the opposite effect in Germany and actually contributed to the reinforcement of the race concept among German scientists.

Nazi rule in Germany (1933–45) certainly had an effect on racial thinking. Consequently, Germans—a “pure white race”—experienced the trauma of finding themselves in the spring of 1945 under the occupation of U.S. soldiers, some of whom were Afro-American. Not unimportant, too, was the state of affairs in the occupation zones. After the defeat of Nazi Germany, reconstruction of a democratic state had begun during occupation by the victorious Allies. Democracy and the respect for human rights in Western Germany was imposed mainly by the Americans, although the blatant (and sanctioned by internal regulations) discrimination against the black soldiers in their own army certainly did not encourage the diminution of racism within German society (Fehrenbach 2005).

After World War II, anthropological research in Germany was, with some minor interruptions, continued by the same group of scientists who had been active during the Nazi era (Proctor 1988). The strong emphasis on the significance of race therefore seems to have persisted in that particular research tradition. This is not to say that postwar German physical anthropologists blindly followed older-generation anthropologists, but they did not feel the need to question the notion of “race,” which, although readily susceptible to ideological misinterpretations, had not lost its biological sense (Rösing and Winkler 1992).

In addition to the above-mentioned German tradition in anthropology between the two world wars, dissimilarity of opinion of German anthropologists on race from the rest of Western Bloc countries might be also because of the fact

that for almost half a century after World War II (between 1949 and 1990) Germany was divided into two countries with its eastern part (situated in the former Soviet occupation zone) reposing under the same Soviet influences, including biological issues, as the rest of Eastern Europe. We do not know from which parts of Germany our respondents came and how many were from the eastern versus western halves.

The Croatian anthropological school. A reason for the dominance (statistically insignificant yet noticeable) of “anti-race” opinions among Croatian anthropologists may be the effect of drift. This could have occurred especially through its variant, known in population biology as the “founder effect,” in a numerically small circle of anthropologists within a single, although prominent, research center. As noted from the keynote declaration of the founders of the center (Rudan et al. 1977), these anthropologists, all of whom had previous research experience at Western institutions, repudiated the notion of “race” in the taxonomic sense as lacking any empirical justification (Rudan et al. 2002). This opinion could easily have latterly been adopted by other representatives of the research unit. In practice, given the already mentioned small size of the anthropological community in Croatia, this probably resulted in its adoption by most of the professional anthropologists in that country.

Educational Profile: Race and Discipline

Our 2002–03 studies show that respondents with physical anthropology as their principal discipline differ significantly from respondents in other branches of science in the degree of acceptance or rejection of race in the taxonomic sense: a majority (55 percent) of the former and a minority (30 percent) of the latter reject the concept.

That significant differences between the responses of people representing various disciplines (such as biology, physical and cultural anthropology, and developmental psychology) exist has already been shown in the 1985 U.S. study by Leonard Lieberman and colleagues (see, e.g., Lieberman and Reynolds 1996). In 1985, more than two-thirds of responding biologists (members of the Animal Behavior Society) accepted the existence of human races, as did half of physical anthropologists (members of the American Anthropological Association), over one-third of developmental psychologists (members of the American Psychological Society), and less than one-third of cultural anthropologists (members of the AAA). According to Lieberman and colleagues (2003b), currently 69 percent of U.S. physical anthropologists and 80 percent of cultural anthropologists reject biological race (although Cartmill and Brown [2003] doubt that this percentage is as large as Lieberman claims).

As previously mentioned, although our questionnaires did not inquire about the respondents’ specific discipline if other than physical anthropology, some respondents who marked “other field” nonetheless stated their educa-

tional profile: among them, geneticists and a biologist, a biomedical scientist, an archeologist, and a demographer. It is probable that fewer persons from these “other” disciplines have been exposed to the research and criticism of the race concept by the physical anthropologists and human geneticists. Moreover, in light of recent reports of different genes predisposing to different diseases, biomedical scientists, pharmaceutical lobby groups, and physicians now set store on the validity of race in the field of medicine. However, little or no background education in biology has resulted in U.S. social anthropologists doing exactly the reverse: that is, rejecting the biological definition of race, while accepting social idea of it.

On the one hand, our results would seem to justify the following statement: deeper knowledge in the field of human biology inclines one to reject race conceptions as inconsistent with biological knowledge (i.e., impossible to verify by the methods of modern biology). On the other hand, European researchers from other disciplines find it easier to adopt the more “commonsense” view: the stereotype of races. One should, however, keep in mind that, regardless of the discipline (physical anthropology or other), Eastern Europeans accept human races more frequently. In sum we agree with the proposal by Lieberman and Reynolds (1996:159) that the rate of acceptance or rejection of the race concept varies with the following factors: the degree of commitment of each discipline to biological or cultural theory, the degree of familiarity with the debate about race and the clinal data, usefulness of the concept for a particular scientific field, the nature of the subject matter, research methods, and the biographical profile of members of the discipline in relation to the broader social and historical context.

Race and Age

In the analysis of age differences in attitudes toward race, one obtains a very complex picture. This is because of interplay of other factors: namely, country of education and, to some extent (as log-linear analysis has revealed), educational profile (discipline). Interestingly, the acceptance of race in the total European sample does not gradually increase with age, whereas its rejection does not gradually decline. It is the middle-aged generation (36–55 years old) that rejects race most frequently: 60 percent versus only 37–38 percent in both younger and older generations. When dividing the European sample into two based on country of education, however, this picture is essentially true only for the Eastern European anthropologists. For their Western European counterparts, age is not a discriminating factor at all: all generations reject race about twice as frequently as they accept it. What, then, might the explanation be for such an uneven age gradient in the Eastern European group?

The oldest generation of Eastern European anthropologists grew up with a strong sense of the reality of race (first in the typological, then in the populational sense)

and, therefore, it is hardly surprising that they still believe that human races exist. Experience of the following factors probably influenced this belief: half a century of socialism; a protracted period of isolation of Eastern European science from that of the West; curtailment of international contact; lack of exposure to the Western world's literature; and, therefore, unfamiliarity with the details of the U.S. debate over race of the 1960s and the human clinal data. These scientists therefore retain their original understanding of "race" probably from the perspective of tradition and convenience.

The middle-age generation has been exposed to new anthropological and genetic information, leading to a greater rejection of race than their older counterparts. However, the phenomenon of the middle-aged generation rejecting the race concept most frequently is interesting. This finding has already twice been reported in other studies: the 2001 Polish survey of Katarzyna Kaszycka and Jan Strzałko (2003a) and, 30 years earlier, in the 1975 U.S. survey of Jerry Stark and colleagues (1979). The middle-aged generation in the former study fell into age range of 39–55 years (Polish anthropologists born 1946–62), whereas in the latter study they fell between age range of 40–59 years (U.S. anthropologists born 1916–35), which actually sets these two groups a whole generation apart. Therefore, their concordance of views on race cannot be explained on the same grounds. Stark et al. (1979) explain this particular U.S. middle-aged generation's views on race being in "a nodal point of history" in United States: their graduate school careers would have occurred just after World War II when the idea of equality for blacks was being promoted. As these authors note: "Lumpers educated in this period are evidently part of an ideological phenomenon larger than their own personal experience" (Stark et al. 1979:93).

What, though, might explain the greater belief in the existence of human races of the youngest generation of Eastern European anthropologists (as is the case for the oldest group)? It does not seem to coincide with the rise in racism (or, perhaps, nationalism and xenophobia) in Eastern Europe in the postcommunist era; this, as Cas Mudde (2005) has shown, has been overestimated in this part of Europe. This "new racism" (which Balibar 1991 calls "racism without races") does not seem to be any stronger in post-socialist Europe than in its Western counterpart (e.g., Pred 2000). Moreover, there is no reason to assume that young anthropologists (as an educated part of the society) would embrace such a notion. We also exclude the possibility that familiarity with the new findings of biomedical research by younger Eastern European anthropologists would favor their acceptance of the existence of human races, as there is no reason to assume that the younger generation of Eastern Europeans would be any more familiar with or more convinced by these findings than the younger generation of Western European anthropologists.

For Polish physical anthropologists at least, Kaszycka and Strzałko (2003a) view the above phenomenon being

the result of educational factors, and we think the same could be true for the whole ex-Soviet region. The avoidance of the "problem of race" occurring after the fall of typologism in Eastern European anthropology might be a factor in the youngest generation not having an opinion on the concept of "race." Therefore, the views of the youngest generation of Eastern European anthropologists may not have arisen as a result of their knowledge of human variability but, rather, from perceived commonsense opinion. Furthermore, neither Polish nor most Eastern European anthropologists (except Croatian) are actually taught that "races do not exist": physical anthropology textbooks in Poland, Lithuania, Russia, the Czech Republic, Hungary, and so forth have never advocated the nonexistence of races, and the same is likely true in most graduate training programs.

CONCLUDING REMARKS

The discourse on division of the human species into races—their definition, origin, number, and genetic determinants—has continued for over 200 years and does not seem likely to end soon. It is time, perhaps, to agree on one point: the problem of human races has ceased to be an issue of biological knowledge. *Race* is a vague term that is impossible to define. In biological terms, enough arguments (above all, the genetic ones) have accumulated against the notion of human races as taxonomic units to consider the matter closed. As George Armelagos aptly summarizes: "Race is dead as a scientific method for understanding human variation" (1995:108).

The issue of whether and to what extent the term *race* is useful outside the biological sense is a complicated one. The notion of "race" owes its persistence also to sociocultural components. In most social sciences in the United States, race is often believed to represent "real" social fact categories. In this social sense, a group of people is designated as a race regardless of their genetic complement. The criteria for defining "social races" varies: from an ancestry, through social status and custom, to phenotypical appearance (Harris 1980; Wagley 1968). However, as Charles Wagley (1968) remarks, race terms, although entangled with sociocultural meanings, remain symbols from the past.

The professional anthropologists we polled were mostly physical anthropologists, and the biological aspect was expressed in the survey questions. It is, therefore, all the more remarkable that the conviction about the "objective" existence of human races was still prevalent among a significant number of these respondents. We have tried to indicate some of the reasons for this outcome. In this article, we clearly show that the views of anthropologists on race are sociopolitically (ideologically) influenced and highly dependent on education. It would be beneficial, therefore, if awareness of this fact is accentuated, at least among specialists, as they, in turn, influence the opinion of the educated portion of society.

Another of our findings is that a considerable number of those who accept race regard it as other than in the taxonomic sense. Certainly, there might not be anything wrong with employing the term *race* in the populational sense (as a substitute for local population); by the same token, there would seem nothing wrong with employing the term *race* in social terms. But to what end? Kaszycka and Strzałko (2003b:34) highlighted the risks associated with any “metaphorical” use of the term: first, it relativizes the essential error of perceiving the existence of subspecific taxa within our species; second, it adversely affects the awareness of people who do not deal with anthropology professionally.

Everyone should answer for themselves the questions asked by Harry Nelson and Robert Jurmain: “What, then, are we to do about the concept of race? Is race a reality? . . . Is it even possible to study races? Is the word “race” so loaded with misconceptions, misunderstanding, fallacy, prejudice, and bigotry that the term itself should be changed and its study limited?” (1991:195). We are well aware that dispensing with the term altogether has proved difficult. One of the reasons is an attachment to paradigms (we might call it “tradition”), but there is also a second factor: convenience. Hence, the struggle against the concept of “race”—in all of its connotations—is bound still to be long and arduous. Nonetheless, it is one eminently worthwhile to continue to undertake.

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NOTES

Dedication. We dedicate this article to the memory of Professor Leonard Lieberman (1925–2007), long-term researcher and fierce critic of the race concept and someone who contributed greatly to its deconstruction. We were very fortunate to get to know him and be able to work with him. We originally invited Len to collaborate with us on this article, and he expressed much interest in the outcome. He, however, did not get to see the final draft to afford us his comments as, sadly, he passed away before the article was completed.

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