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Development and Decline of the Interest in Dermatoglyphics

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Abstract: The development of the interest in the dermatoglyphic studies from the first works on fingerprints to an increasing number of works was illustrated. The next decline since 2010s was also illustrated. A wideranging bibliography concerning authors and journals dealing with dermatoglyphics confirms what has been reported.

Key words: dermatoglyphics

1. DISCUSSION

Leaving aside the pioneering works on fingerprints by Galton, 1892; Henry, 1901; Wilder, 1904; Bonnevie, 1924 (to name just a few), it was in the article by Cummins and Midlo (1926) that the term "dermatoglyphics" was introduced to indicate the set of ridges and furrows present on the fingerprints, the palm of the hand and the sole of the foot. However, it was with the fundamental work of Cummins and Midlo (1943), with a new edition in 1961 that the study of dermatoglyphics took hold not only in criminal anthropology but also in medicine, biology, population biology, embryology, primatology, paleodermatoglyphics and pathology. The increase in studies concerning dermatoglyphics was due above all to: the methodological simplicity of their recording, usually by means of the non-invasive and inexpensive ink method; their immutability starting from 4-5 months of intrauterine life when they are fully formed; their genetic basis (not fully clarified but mainly polygenic which makes them less sensitive to random variations); etc. More or less from the 1960s onwards, there was an increasing number of both conference (or sections of conferences) dedicated to dermatoglyphics and books reporting the related studies or new studies. There were several generalist books from 1969 (edited by W. Hirsch) to 2000 (edited by NM Durham, KM Fox, CC Plato) (see literature cited), accompanied by other more specialistic ones such as those by: Holt, 1951-1968; Alciati, 1960 a; Penrose, 1963-1965; Weninger, 1965-1973; Dallapiccola, 1968; Loeffler, 1969; Plato, 1970; Schaumann and Alter, 1976; Babler, 1978; De Wilde et al., 1981; De Wilde, 1979; Malhotra and Reddy, 1984; Giuliani, 2004; until to Tornjova-Randelova and Paskova-Topalova, 2011. Works on individual populations increased, and here I will cite, for purposes of brevity, only 1 or 2 publications per author and, for the same reason, generally only those authors who made the study of dermatoglyphics their main field of research: Pons, 1952-1954; Alciati, 1960 b; Mavalwala, 1962; Atasu and Telatar, 1968; Sunderland, 1968; Singh, 1971; Bhanu, 1972; De Stefano, 1974; Gyenis, 1974; Floris, 1975-1977; Plato et al., 1975; Rudan, 1975; Aue-Hauser, 1976; Oyhenart-Perera, 1979; Aue-Hauser et al., 1980; Matznetter, 1983; Hauser and Abraham, 1985; De Diaz Ungria, 1986; Sorensen Goodson, 1986; Gualdi Russo, 1987; Pospisil, 1987; Heet, 1990; Milicic and Rudan, 1991; Reddy, 1992; Atasu, 1993; Sokal, 1993; Sanna and Floris, 1995; Kralik et al., 2002; Nagy, 2005; Karmakar et al., 2007; Cam et al. 2008). And there were many others. Naturally, scientific journals published many studies and in fact the American Journal of Physical Anthropology dedicated number 2 of volume 42, 1975, entirely to works on dermatoglyphics, as did the International Journal of Anthropology with number 1 of volume 13, 1988 and number 1-2 of volume 20, 2005. In 1965 the first number of Dermatoglyphic-News Bulletin (SB Holt, ed.) was published. The journal continued for years and then gradually declined in a climate of general indifference, It can be said that the interest in dermatoglyphics also decresed more or less starting from 2005, probably with the increase in our knowledge of DNA and related characters. As proof of this, in 2018 (investigation by A.) no

study concerning dermatoglyphics appeared in the following journals: American Journal of Physical Anthropology; Human Biology; American Journal of Human Biology; Anthropologischer Anzeiger (data available for 2013; The Anthropologist (data available for 2017); Human Heredity (2017/2018); Annals of Human Biology; Journal of Anthropological Sciences; Annual Review of Anthropology; Current Anthropology (which at least published one, but back in 1981; Floris, 1981), with one exception: Homo-Journal of Comparative Human Biology (in which there appeared one study out of a total of 40). Rather little, I would say.

Therefore, have studies on dermatoglyphics disappeared? No, not at all, because many publications have appeared more or less since the 2010s, generally dealing with various pathologies (ranging from diabetes to psoriasis, schizophrenia, obesity, blindness, etc.) in the most disparate journals, such as: International Journal of Pharma. Research and Health Sciences; International Research Journal of Management Sociology & Humanities; Journal of Health and Allied Sciences; International Journal of Medical Science Research and Practice, and so on). Fingerprints were investigated for the most part, and obviously not always with citations of those who have a long published on these same topics; but evidently time erase everything. Among the above-mentioned journals, only Homo and Human Biology Review continued to occasionally publish works on dermatoglyphics.

2. CONCLUSION

In conclusion, it can be hoped that the study of dermatoglyphics will recover the vigour it has shown in past years, for example by relaunching the Bulletin and realizing that the results achieved are not different from those obtained with more modern and sophisticated methodologies.

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