

**Anthropology.** — *The Anthropology of Mesopotamia and Persia. B: Jesidis and (Moslim) Arabs from Irak, with some remarks on Kurds and Jews*<sup>1)</sup>. By Dr. HARALD KRISCHNER and Mrs. M. KRISCHNER (American University of Beirut, Syria). (Communicated by Prof. C. U. ARIËNS KAPPERS.)

(Communicated at the meeting of February 27, 1932.)

In the following pages we present the results of our investigations on some other groups of the population of Upper Mesopotamia. They are based on the measurements of 94 Jesidis and related individuals, 508 (Moslim) Arabs from Mosul, 32 Beduins from the Irakkian desert, 61 Kurds and 58 Jews: 752 individuals all together.

Whereas with the groups mentioned in our first paper a subbrachycephalic peak and a hyperbrachycephalic peak occurred, the former being more pronounced with the females the latter with the males, our *Jesidis*<sup>2)</sup> with some other individuals from the same place (Bahsany) show the interesting fact that also with the males the subbrachycephalic index is predominant.

Although with the Jesidis (fig. 1) we still find both peaks, the 83 and 87 peak, the 83 index is by far the most frequent, even with the males. As the mesocephalic admixture is also very small here, we have to do with a fairly pure male 83 group.

The disappearance of hyperbrachycephalics, even among the males, is still more obvious with the (*Moslim*) Arabs from Mosul (fig. 2A and 2B). Hyperbrachycephalic indices are rare with these Arabs. The same is observed with the Southern Arabs, especially in Yemen and Oman. To make sure of this we made a curve of all the indices quoted by MOCHI<sup>3)</sup> (including those of LIVI, SERGI and GIOVANNOZZI), and those registered

<sup>1)</sup> The following is the continuation of our study on the Armenians, Khaldeans, Suriani (or Aissori), and Christian "Arabs", published in the same volume of these Proceedings.

<sup>2)</sup> The anthropological data concerning the Jesidis are few and very different. CHANTRE (Arch. du museum d'hist. natur. de Lyon T. VI, 1895, p. 127) says that the Jesidis of Transcaucasia belong to the Kurdish nation. Three men measured at Zara had an average index of 72.36 (which, by the way is not typically Kurdish) three others at Karakou had an average of 78.61 (which is Kurdish). He further mentions that GAUTIER measured four individuals with an average of 88.15 near Isphahan. CHANTRE himself measured 4 Jesidis at Hamah in Syria, 4 at Bayazid in Turkey and found them to be strictly brachycephalic, but their index did not surpass 86. The average of all the Jesidis measured till 1895 is 81.12. VON LUSCHAN (Völker, Rassen und Sprachen 1922, p. 104) on the other hand considers them as Kizilbaschi and refers to LAYARD's description (of the Province of Chusistan. Journ. of the Royal Geogr. Soc. Vol. 16. 1846?). We have not been able though to find LAYARD's data in this paper).

<sup>3)</sup> A. MOCHI. Sulla antropologia degli Arabi. Archivio per l'Antropologia e la Etnologia, Vol. 37, 1907, p. 411.

by LEYS and JOYCE<sup>1</sup>), 179 indices all together (fig. 3). Apart from lower index peaks depending probably on Hamitic and Adnan Arab admixture,

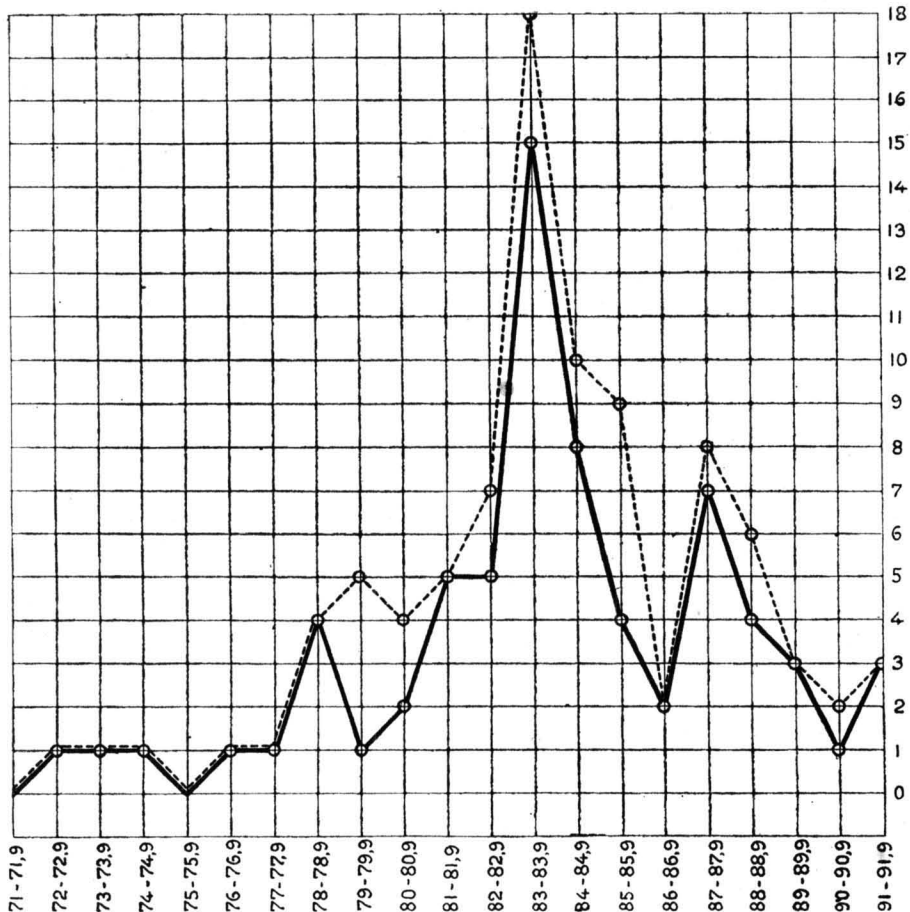


Fig. 1. The cephalic indices of 37 male Jesidis from Bahsany and 33 male Christians from the same place and Bahshieka: —. The same + 22 female Jesidis from Bahsany (dotted line).

there is a very outstanding and homogeneous peak from 81 to 83 in this curve, containing 52 individuals (about 30 % of the whole curve). The

<sup>1</sup>) N. M. LEYS and T. A. JOYCE. Note on a series of physical measurements from East-Africa. Journ. of the Anthropological Institute of Gr. Brit. and Ireland, Vol. 43, 1913, p. 195 (see especially p. 260—264).

For the anthropology of the Southern Arabs we also refer to GIUFFRIDA RUGGERI (Crani egiziani antichi ed arabo-egiziani. Atti della Soc. romana d'antrop., T. 15, 1910) who examined the first cemetery of the Arab invaders of Egypt at Abassieh and to BERTHOLON et CHANTRE. Recherches anthrop., dans la Berberie orientale, Lyon, 1913. SELIGMAN already stated their „Armenoid” features (The physical characters of the Arabs. Journal of the Anthropol. Inst., Vol. 47, 1917, p. 234) in contradistinction to the Adnan or Northern Arabs. R. MARTIN in his Anthropologie (Sec. ad., Bnd. II, p. 778) further mentions that MUGNIER already gave the Yemenite Arabs an average index of 82.5 only. We have not been able to find MUGNIER's paper.

number of hyperbrachycephalics, however, is only 13, being about 7.3 %.

More outstanding even than the few hyperbrachycephalic figures in our Irakkian Arab males and females is the 80 peak, also found by KAPPERS in his Irakkian population and a 78 peak.

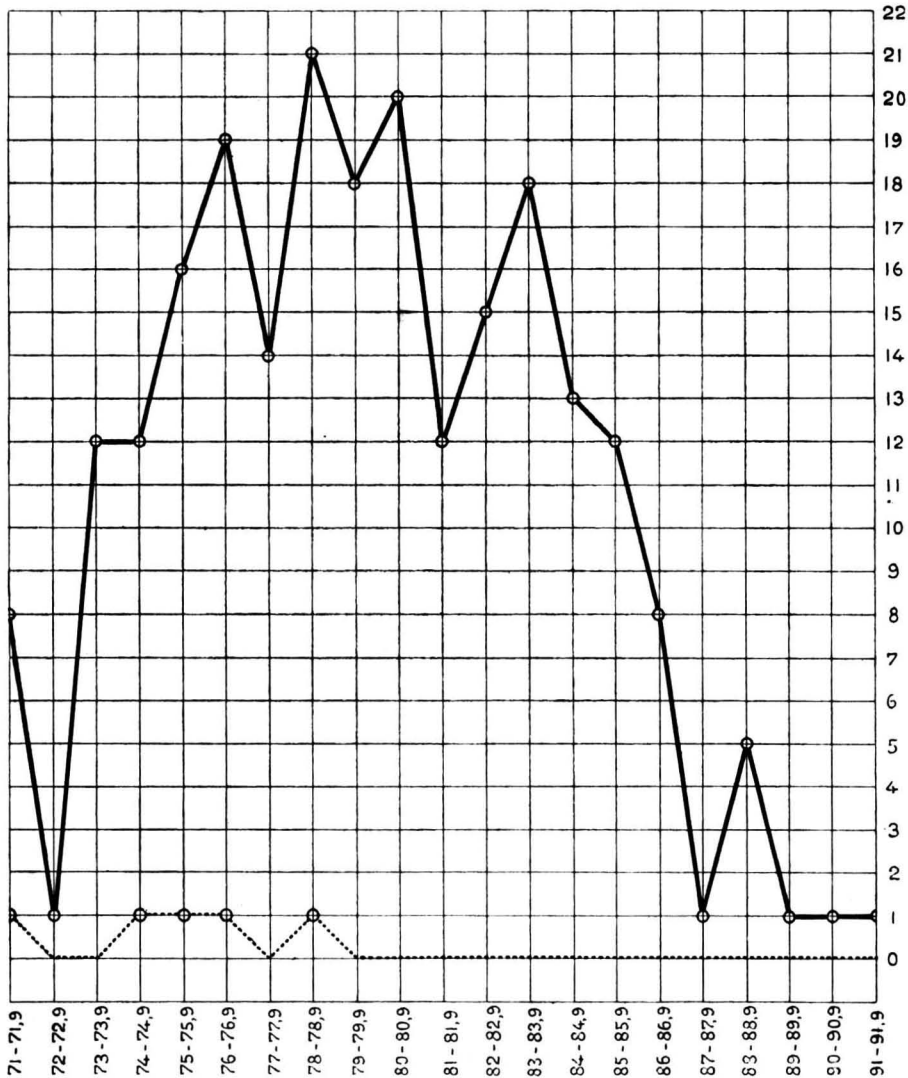


Fig. 2 A. The cephalic indices of 225 male Moslim Arabs from Mosul, including 5 Beduins from Irak (dotted line).

Besides, among both the male and female Moslim Arabs from Irak there are a good number of lower, apparently Adnan Arabs (76) indices, as is to be expected from the fact that the majority of the Arabs in the Northern desert are Adnan Arabs.

From this it appears that, whereas the Armenians, Khaldeans, Suriani and Christian "Arabs" from Irak are a mixed population consisting mainly of two groups, an 83 and 87 one, of which with the males the 87 group

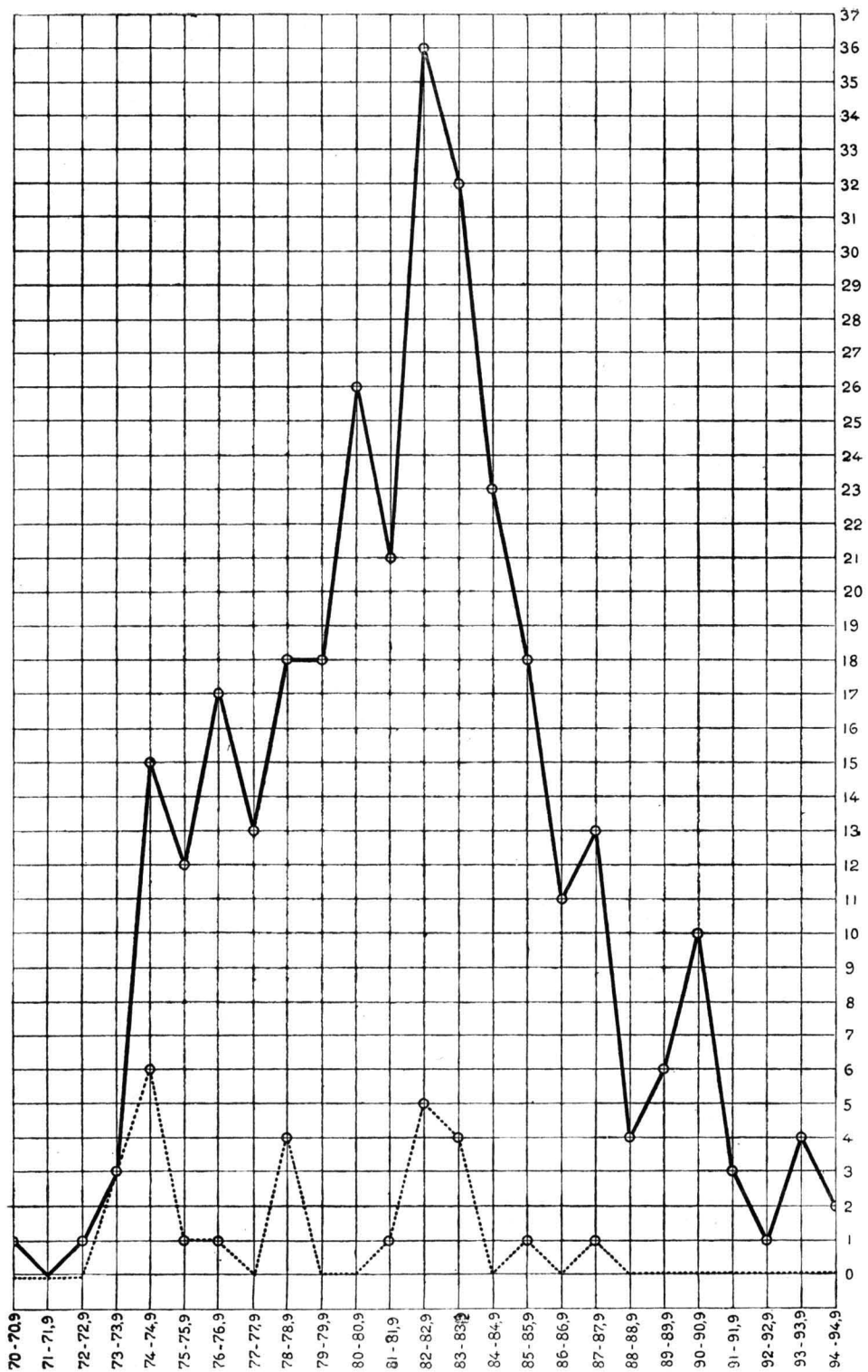


Fig. 2 B. The cephalic indices of 282 female Moslim Arabs from Mosul including 27 female Beduins from Irak (dotted line).

is the most striking one, the 83 index becomes more and more typical, *also for the males* among the Jesidis and other people from Bahsany, and especially with the Kohtan Arabs from Mesopotamia and Southern Arabia.

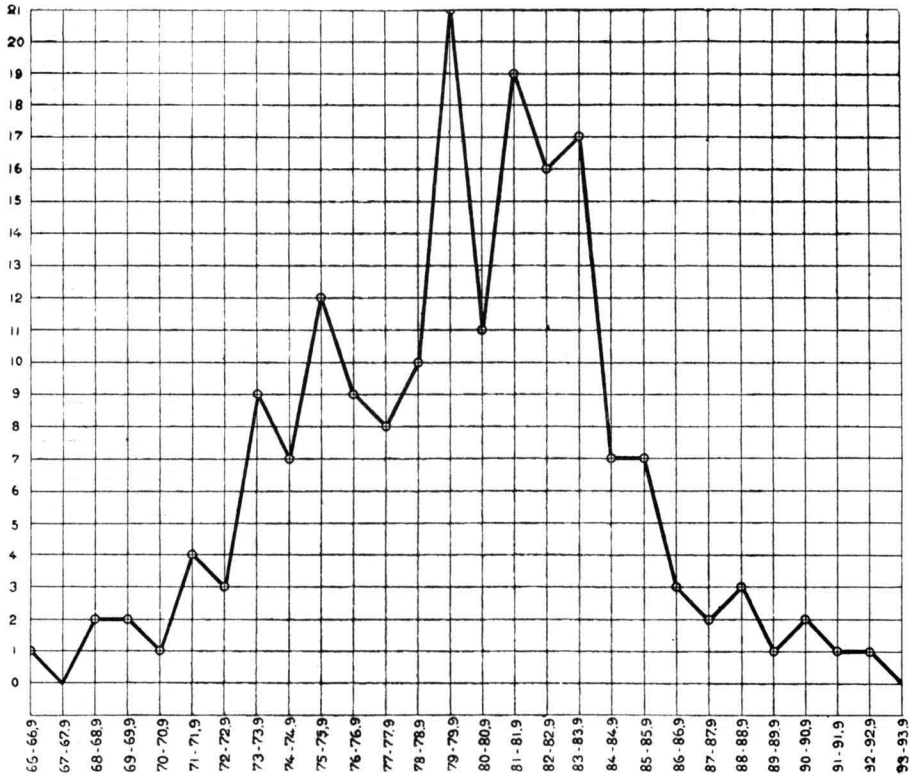


Fig. 3. The cephalic indices of 179 Arabs from Yemen and Oman (47 registered by MOCHI: 132 by LEYS and JOYCE).

That the latter hardly if at all have the 87 group, makes it more probable that the 87 index is a specific feature of the peoples in the Northern districts.

This 87 group may be either a special racial admixture or result from a stronger artificial flattening of the head with the boys (CHANTRE). The obvious predominance of the 87 peak among the Anatolian Turks, as demonstrated by VON LUSCHAN<sup>1)</sup> and confirmed by KAPPERS<sup>2)</sup>, the constancy of the 87 peak next to the 83 peak in the Armeno-Khaldean-Assyrian groups and its absence among the Jesidis and Kohtan Arabs, may plead for considering it a hereditary and consequently racial distinction, as we already stated in our first paper.

We furthermore saw that some of these groups show mesocephalic Kurdish or Persian admixtures, while with the Kohtan Arabs the rather

<sup>1)</sup> VON LUSCHAN. *Völker, Rassen u. Sprachen*, Berlin, 1922.

<sup>2)</sup> Contributions to the Anthropology of the Near-East, No. VI: Turks and Greeks. *These Proceedings* Vol. 34, 1931, p. 1085.

mysterious "desert border population" index (80) is a striking addition, next to the lower Adnan Arab index.

We will not end this part of our report without saying a few words concerning the Kurds and Jews.

As demonstrated by CHANTRE (l.c. supra) and KAPPERS<sup>1)</sup>, in conformity with VON LUSCHAN's (l.c.s.) and IWANOWSKY's<sup>2)</sup> statements, the vast majority of the *present* Kurdish people is a prevailing mesocephalic race (peak 78—78.9) mixed with Caucasian subbrachycephalics, but containing hardly any hyperbrachycephalic admixture.

Only DUHOUSSET<sup>3)</sup> (who, however, measured only 5 Kurds) and PITTARD<sup>4)</sup>, who measured "Kurds" in the Dobroudja (between the Danube and the Black sea) which has a prevailing slav i.e. brachycephalic population mixed, at that time, with Turks, found them to be hyperbrachycephalic (86.5). That the two latter authors could come to such a statement has to be explained from the places where they measured.

This appears from the few measurements we took at Mosul with 15 male and 33 female Kurds. Among the Kurds of Mosul brachycephaly also prevails, the highest peak being at 84—85.9 (fig. 4). This, as well as the

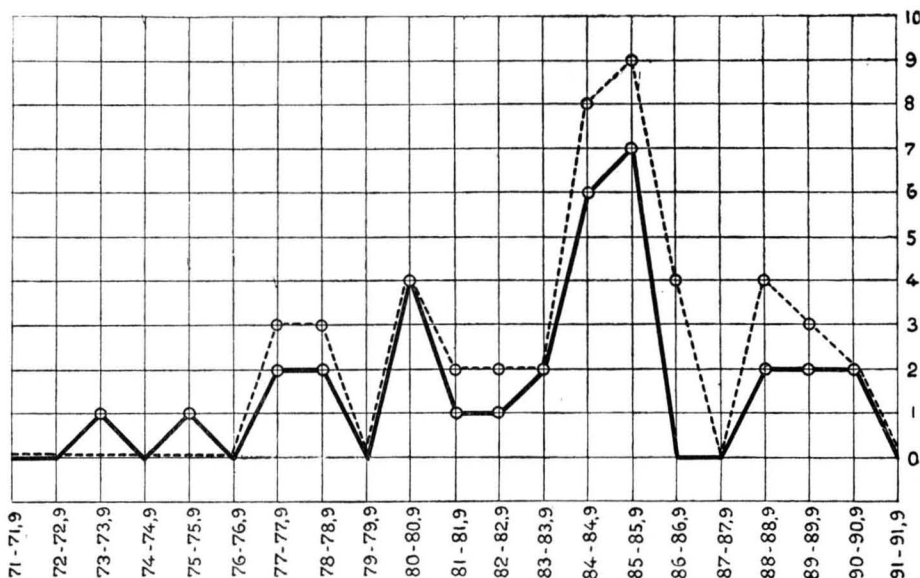


Fig. 4. — The cephalic indices of 33 female Kurds from Mosul; dotted line the same + the cephalic indices of 15 male Kurds from Mosul.

1) Contributions to the Anthropology of the Near-East, No. V: Kurds, Circassians and Persians. These Proceedings Vol. 34, 1931, p. 531. —

2) IWANOWSKY. quoted from MARTIN's Anthropologie.

3) DUHOUSSET. Etudes sur les populations de la Perse, Paris, 1863, quoted from de Khanikoff's Mémoire sur l'Ethnographie de la Perse, Martinet, Paris, 1866.

4) E. PITTARD. Les peuples sporadiques de la Dobrodja III. Contribution à l'étude anthropologique des Kurdes. Bulletin de la Société Roumaine des Sciences, Bucarest, 1911. Annul. XX, p. 33.

fact that the average of 12 Kurds we measured in Persia was distinctly mesocephalic, clearly shows the Armenoid or Ponto-zagrian influence on the Kurds at Mosul.

The Armeno-Khaldean influence on the Kurds from Mosul even appears in the fact that the average index of our female Kurds in that place is lower (83) than with our males (84.1).

In connection herewith it is interesting that CHANTRE found the Kurds from the Gordian mountains to be closely related with the Armenians of that region and that some of them still have Armenian names, or names of Armenian satrapies (c.f. also PITTARD *Les peuples des Balkans* p. 129). Apparently this already occurred with their ancestors, the Guti or Qurti, whose chieftains, according to E. SPEISER<sup>1)</sup>, borrowed their names from their presumably more civilized neighbours, such as the Hurrians and Haldians (= Khaldeans = Urartians or proto-Armenians). SPEISER is inclined to consider the ancient Guti or Qurti with the ancient Lullu (Lurs) and even the Elamites as forming one brachycephalic Zagros stock. If it should appear that the ancient Qurti themselves were predominatingly brachycephalic, the complete agreement between the 322 measurements registered by CHANTRE (l.c.) and 106 taken by KAPPERS (l.c.) clearly proves that this does no more hold good for the majority of the present Kurds, who are distinctly mesocephalic. Similarly with twelve Kurds we measured at Hamadan, the average was 79.5 closely approaching the Kurdish peak found by CHANTRE and KAPPERS.

The "Armenoid" or rather Hurrian influence is still more obvious with the Jews from Mosul and from adjacent parts of North Persia (fig. 5).

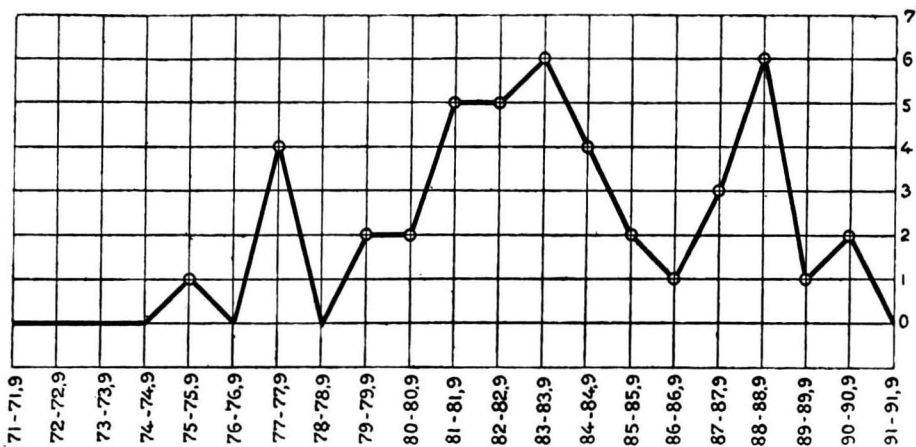


Fig. 5. The cephalic indices of 44 male and female Jews from Mosul and North Persia.

<sup>1)</sup> SPEISER. *Mesopotamian origins*. University of Pennsylvania Press 1930, p. 114. c. f. also SIDNEY SMITH. *Early history of Assyria*. Chatto and Windus, London, 1928, especially Chapt. VII and VIII.



Although we only measured 44 Jews from this region even this small number, when brought in a curve, gives a 83 and a 88 top, a striking confirmation indeed, of VON LUSCHAN's statement concerning the Armenoid character of the Northern Jews. The Armenoid character of the Northern Jews is the more striking as with 14 South Persian Jews we only found an average index of 76.6, — both statements confirming the results obtained by WEISSENBERG on Northern and Southern Jews in Persia <sup>1)</sup> and Mesopotamia <sup>2)</sup>).

Speaking of Armenoid influence on the North Persian Jews and Kurds from Mosul, it may be mentioned that near lake Ourmiah (an exquisite Armenian centre) CHANTRE found the same average index with the Armenians, Kurds and Jews.

We see from this that the same index or the same combination of indices is found with peoples that speak a Caucasian language (the Armenians) as with peoples that speak a Semitic language (the Northern Jews and the Kohtan Arabs of Mesopotamia and Yemen).

This is a strong proof that language is a dangerous guide in stating racial relationships or racial differences, as also appears from the "Armenoid" or rather Hurrian character of the "Arab" speaking Lebanese.

There is no doubt that anthropology has to overbridge the artificial gaps made by languages, in our case between the so-called Semitic and Non-Semitic population of Upper-Mesopotamia <sup>3)</sup>).

We have to realise that there are no "Semitic" races but that there are Semitic languages spoken by various races, other branches of which may speak an Indo-European or a Caucasian language.

Sir ARTHUR KEITH in his report on the human remains of Al Ubaid (l.c. infra), expresses exactly the same idea for the dolicho- and mesocephalic population of Lower Mesopotamia (p. 216): "Iranian and Semitic, both have clearly arisen at some remote period from a common ancestry" and further: "The Mesopotamian people, both past and present, represent a transition between Iranian and Semitic."

And then naturally the question arises to which of the so-called "Aryan speaking" peoples those "Semitic speaking" peoples are related.

The present Semitic speaking peoples are the Arabs and Jews. The fact that among the Arabs we have a mesocephalic Phoenico-Palmyrene group (Adnan Arabs) and a brachycephalic group (the Kohtan Arabs) coincides with the fact that among the Jews we have the mesocephalic Sephardim and the brachycephalic Aschkenazim.

---

<sup>1)</sup> WEISSENBERG: Zur Anthropologie der Persischen Juden. Zeitschr. für Ethnologie, Bnd. 45, 1913, p. 114.

<sup>2)</sup> The same: Die Mesopotamischen Juden in anthropologischer Beziehung, Arch. f. Anthropologie, N. F. Bnd. 10.

<sup>3)</sup> c.f. also DUDLY BUXTON, The peoples of Asia, Alfred Knopf, New York, 1925, p. 91 and ARIËNS KAPPERS, Contributions to the anthropology of the Near East, No. 4. The Semitic races. These Proceed., Vol. 33, 1930.



Furthermore the mesocephalic Arabs as well as the mesocephalic Jews have an average index of 77—78 and among the brachycephalic Arabs and brachycephalic Jews subbrachicephaly, especially indices between 81 and 83, are prevailing (except in rare cases where the hyperchachycephalic Armenoid index of 87 influences either of them).

This may indicate that similarly as the Sephardim are related to the Phoenico-Palmyrene-Adnan Arabs (as pointed out by KAPPERS<sup>1</sup>) and as also appears from the bloodindex), the Aschkenazim may be linked to the Kohtan Arabs, either directly or by a tertium and that this link was lying in ancient Assyria, or even with the Akkads that occupied the country before the Assyrian kingdom dominated there.

This may find some support since KAUTSCH and ALBRIGHT made it probable that the Harran Naharein from where ABRAHAM's people originally came was in the Northern fertile crescent from where also the Kohtan Arabs may originate. In this respect it is also interesting that especially with the Kohtan Arabs similar noses and lips may occur as with the Aschkanazim Jews, the fleshy aquiline nose, very rare with the Adnan Arabs and also less frequent with the Sephardim Jews.

VON LUSCHAN and SELIGMAN already emphasized that this is a rather Armenoid feature. If, however, we speak of Armenoid features, we should realize that the Armenians and Khaldeans and Assyrians related to them, clearly contain two main components, the hyperbrachycephalic 86—87 and the subbrachycephalic 83—84 component and so the question arises whether both these components or especially one of them underlies the Kohtan Arabs and the Aschkanazim.

Since with the Aschkenazim as well as with the Kohtans the subbrachycephalic index prevails over the hyperbrachycephalic, we suppose that the "Armenoid" link that connects those groups especially involves the 83 Armenoids, which also is the more frequent element in Yemen, while the 87 Armenoids according to VON LUSCHAN and KAPPERS are more frequent in Northern Anatolia (Turkey).

If the value of the cephalic index as a racial indicator is as high as seems to be proved by MORANT<sup>2</sup>) and confirmed by our own researches and those of KAPPERS it would be interesting to know if there has been a time when the 83—84 group of Upper-Mesopotamia, now widely spread amongst Armenians, Khaldeans, Assyrians, Aschkenazim and Kohtans was a more homogeneous ethnic group.

Especially will the question arise if the ancient "Semitic speaking" Akkad population of Upper-Mesopotamia may be racially connected with the Aschkenazim as well as with the Kohtan Arabs. As far as we know hitherto no Akkad skulls have been found. It would, however, be interesting

<sup>1</sup>) Contributions to the Anthropology of the Near East. IV. The Semitic Races. These Proceedings Vol. 34 1931. Unfortunately the bloodindex of the Kohtan Arabs (unless we should consider the rather interbreeding Druses as such) is as yet unknown.

<sup>2</sup>) MORANT. A preliminary classification of European races. *Biometrika*, Vol. 20 B, 1918.

to know if this people in contradistinction to the Sumerians<sup>1)</sup> were sub-brachycephalic. If the ancient Assyrians and the present Aissori (or Suriani) as well as the Kohtan Arabs contain descendants of the Akkads the latter may have had the subbrachycephalic type and then the Kohtan Arabs might rightly bear the distinction of "el ariba" they give themselves, thus denoting their origin from the most ancient Semitic speaking group known in history.

The hyperbrachycephalic mixture added to the Armeno-Khaldean Assyrian groups probably came from Anatolia and may be due to Hittite influence, the earliest centre of which is probably to be looked for in Turkey.

In connection herewith it is an interesting fact that the ancient Hittite monuments more than the Assyrian reveal that peculiar post-auricular shortness of the head, which is the only means by which we can distinguish in profile projection brachycephalics and especially hyperbrachycephalics, of which only the postauricular shorthheads are of hereditary predominance (FRETS)<sup>2)</sup>.

---

<sup>1)</sup> The exquisite dolicho- and mesocephalic Sumerian skulls from El-Ubaid (Ur of the Chaldees) and those from Kish have a totally different aspect from the Kohtan skulls. According to SIR ARTHUR KEITH they show a greater resemblance to the (Adnan) Arab type or rather a stock common among the (Adnan) Arab and Southern Indo-European as found in Afghanistan and Beluchistan up to the anthropological watershed of the Indus. Cf. Publications of the joint expedition of the British Museum and of the museum of the University of Pennsylvania to Mesopotamia, Vol. 1. Al-Ubaid by H. R. HALL and C. L. WOOLLEY. Oxford University Press, 1927.

For the description of the Sumerian skulls found at Kish, see L. H. DUDLEY BUXTON in: Excavations at Kish by S. LANGDON, Oxford University Press, 1924, Vol. 1. BUXTON, however, emphasized that at Kish in addition to the prevailing dolichocephalic skulls some distinctly brachycephalic skulls were already found, which may show that the brachycephalic race made a very early appearance in this region (c.f. also DUDLEY BUXTON. The peoples of Asia, Alfred Knopf, New York, 1925, p. 103). —

<sup>2)</sup> FRETS. Nouvelles observations sur l'hérédité de l'indice céphalique. 3ième Session de l'institut anthropologique de Paris, tenue à Amsterdam, 1927 (publié 1928). The praeauricular shortness of the head is regressive in heredity.

---

**Geology.** — *The Seroe di Cueba limestone from Curaçoa.* By M. G. RUTTEN and L. W. J. VERMUNT. (Communicated by Prof. L. RUTTEN.)

(Communicated at the meeting of February 27, 1932.)

**Geology:**

The Seroe di Cueba, a flat hill about 70—90 m. in height lies in Northern Curaçoa near the Eastern shore. The geology of the Seroe di