

Psychology. — *A statistic inquiry into the Psychic Differences between the Generations of To-day and Former times.* By D. WIERSMA.
(Communicated by Prof. E. D. WIERSMA.)

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When people talk about the spirit of the age and ascribe to it all sorts of present-day views in the domain of science, art, and social life, or striking phenomena, they mean that in some respects the living generation differs from those of former times. Their thoughts, their sentiment and actions are not perfectly alike. Of course, in some respects this difference results from improvements in technics and in general insight: the achievements of former generations have placed at our disposal more and different data, that will cause our judgments, our actions, and in part also our emotional reactions to be different from those of former generations, had they been living under similar circumstances to ours. The fact that travelling has become more common than 30 or 40 years back, is no doubt owing to the great improvement in means of communication. That the latest sunclipse caused no terror and fear, as it did a few hundred years ago, but everywhere a lively interest of a more or less scientific character, is to be ascribed to a better insight into the nature of the phenomenon, which has now become quite familiar to us. Now, suchlike differences with former generations are not generally attributed to the spirit of the times. This term is reserved for the difference in psychic qualities of men of to-day and of former times. It seems interesting to me to ascertain to what extent these differences really exist and whether they can account for some specific peculiar features of our time.

Increased love of pleasure is often considered to be such a peculiar feature. The rage for dancing, the intense interest in cinemas, music-halls and coffeehouses go to prove this. But in earlier times almost every older generation judged of the younger one in the same way; this already must give us pause. The decreased use of alcohol, evident from the returns of the excises, from the frequency of drunkenness, and from the decrease of alcohol-psychoses, very manifest in the psychiatric clinic at Groningen, rather points to a new object of pleasure-seeking than to a greater love of pleasure.

A number of other features of our time may perhaps be classed as the results of a diminished sense for reality. The progress of anthroposophy, of theosophy, spiritism and the like shows that, rather than allowing themselves to be acted upon by nature and the human world about them, merely for judgment, sentiment and action, people of our time (more than former generations) place a higher value on ideas and emotions of their own, when forming an opinion of the world. That this opinion satisfies their own emotional desires seems to be of greater importance than adhering to

observed facts; the interest of men has been transferred from the outer world to man's inner life with all its contrarities and inconsistencies, which often reveal themselves in the most grotesque and worst founded constructions, often manifested again in the widely divergent philosophical speculations of our days.

There is no mistake, that also in Art a corresponding shifting of interest exists. The days of realism and naturalism have long gone by; art no longer interprets the world seen again "à travers d'un tempérament", but is rather devoted to the gratification of emotional wants. Impressionism still reproduced the reaction of the artist upon the outer world, expressionism is more removed from it, as the outer world becomes only a means to express the inner life of the artist. In various directions we can observe endeavours to get completely detached from the outer world. In literature as well as in the art of Painting, Sculpture and Music this tendency reveals itself, perhaps dadaism is one of its extreme excesses. Spiritualization and self-centralization are modern words expressive of a greater interest for inward than for outward experiences: to this tendency we owe besides works of grandeur also many strange, and grotesque creations. A certain disintegration is especially noticeable in a great number of various sorts of schools, but often also in the work of the same artist.

Science also presents a tendency to turn aside from reality. More often than formerly Reasoners start from pre-conceived ideas, fitting in with their conception of the world, while their respect for real facts has diminished. Another result of it is the co-existence of very many views of which the representatives are reasoning away without being understood, as well as a certain vagueness and want of exactitude. Quite recently these phenomena have been signalled by HOCHÉ (4), who also ascribed them to a lessened sense for reality. Experimental psychology e.g. which works purely inductively, does not go through a golden period now, whereas phenomenology does, as it bears on the subjective experiences of man. Just as in Art, a tendency to disintegration may be observed: whereas in days of yore researchers tried to find only the causal connection of phenomena, those of the latter years have emphasized the so-called conceivable relations which are supposed not to have anything to do with causality. This new orientation, which has also been introduced into physiology and other branches of science, has no doubt furnished important results; I only mention the fact to point to the change without entering into an appreciation of the several directions.

We said that nowadays a general tendency may be observed to avert from the outer world, and to be wrapped up in one's own thoughts and inner life, which BLEULER (1) has styled "autistic" thinking, thereby to point to the resemblance such a mode of thinking bears with that of a man in a certain psychosis: "dementia praecox". JASPERS (5) in his monograph *Strindberg und Van Gogh* calls attention to the present predilection for the schizophrenic phenomena and even non-psychologists

were struck by this resemblance. I remember a caricature in the weekly paper "Life", which ridiculed all sorts of peculiarities of modern life, with the subscription: "our time suffers from dementia praecox".

It has often been presumed that these peculiarities of the present generation are to be considered as a consequence of the war; but it should, on the contrary, be remarked that the modern peculiarities regarding view of life, and conceptions of art and science had already existed for a longer or shorter time before the war, only they became more pronounced and striking after it. It will therefore be our task to ascertain whether in the present generation a greater frequency can be found than in older generations, of properties that can account for the peculiarities discussed above.

Splendid material for this investigation is supplied by the research-work done by HEYMANS and WIERSMA in 1905 and 1923. The first inquiry (2), as known, was intended to establish the heredity of psychic properties; therefore in this inquiry a comparison was also made between the older and the younger generation and was described in detail by the authors (3). The second inquiry (8) was made to observe whether there was a relation between physical stature and psychical qualities; it will therefore be designated as stature-inquiry, although in this paper I shall busy myself only with the psychological part, which regarded the same properties as those of the heredity-inquiry. The results of the two inquiries present in general a striking resemblance, bespeaking their reliability. Still, differences do occur, no doubt. They are to be ascribed to the different views of the reporters. This plays of course a much greater rôle in the stature-inquiry, which comprised 400 subjects, than in the heredity-inquiry extending over 2500 persons. For the determinations of the magnitude of a difference, that may be attributed to mere chance only, I followed the same method applied by HEYMANS and WIERSMA for an intercomparison of groups falling within the heredity-inquiry, viz. a comparison of the procentic values for the properties, asked for in the first 8 questions. For men, as well as for women, the mean difference lay between 4 and 5, so that the assumption is admissible that an increase or a decrease of the percentage of some quality or other of 4 or 5 or more, rests on an other basis than mere chance.

So we are in a position to compare the older generation of the heredity-inquiry with the younger generation of the same inquiry and with the generation of 1923, which is expressed in the stature-inquiry. As to age the last two can easily be compared with each other. The age of the men of the younger generation of 1905 averaged 35, that of the men of 1923, 43; the women respectively 33 and 39 years. The older generation of 1905 was, of course, much older, the mean ages of men and women being here respectively 67 and 63, some differences found might, therefore, be based on normal differences in psychic qualities, shown by older people, as compared with younger ones. When we find, however, that the difference of certain properties shown by the younger generation of 1905, has become

still greater, then we may assume that we have not to do with a difference in age, but a difference in properties of the generations themselves. For since the generation of 1923 is on an average older than that of 1905, a difference in age would have become less evident instead of more evident.

Now, first of all as regards an increased love of pleasure, the results do not tally completely with the current opinion. In our investigations we inquire after a fondness of good cheer, after the use of alcohol, extravagance in sexual life and a fondness of going out. The procentic values found have been tabulated below (*s* = the older *j* the younger generation).

TABLE I.

a. Men.

	1905 <i>s.</i>	1905 <i>j.</i>	1923
Fondness of good cheer	43	49	51
Not	37	30	21
Drunkard	3	1	1
Regularly	31	20	9
Occasionally	50	57	63
Never	13	11	16
Sexual extravagance	6	11	12
Reserved	69	58	65
Going out	24	32	20

b. Women.

Fondness of good cheer	30	31	30
Not	50	42	40
Drunkard	0	0	0
Regularly	3	2	1
Occasionally	47	45	45
Never	30	30	30
Sexal extravagance	2	2	6
Reserved	69	58	70
Going out	19	35	23

These tables show, indeed, a lessening in the use of alcohol for either sex. Men, on the contrary display an increasing inclination to good cheer ; for women we obtained smaller percentages in this respect. The results regarding sexual propensities are peculiar. In the two sexes there is a higher degree of extravagance, especially among the women of the youngest generation. On the other hand, also the percentages of reservedness have risen considerably in 1923. For the present I cannot say for sure, what is the cause of this result ; anyhow it is clear, that it would not be right to speak of a general tendency to sexual indulgence. As to pleasure-seeking, in 1905 the younger generation seemed to be much fonder of going out than the older one, but in 1923 this augmentation is not noticeable. This is perhaps due to the fact that in 1923 frequenting coffeehouses and cinemas had become so common, that the reporters have taken notice only of the extreme cases. In that case the percentages of 1905 and 1923 are not comparable. Some figures representing behaviour in money-matters are at our disposal, an augmentation of sensual pursuits will readily involve greater wastefulness, a regress of economy. Table II gives the percentages.

TABLE II.

a. Men.

	1905 s.	1905 j.	1923
Avaricious	2	3	1
Economical	44	35	53
Free-handed	41	41	39
Lavish	2	10	2
In debt	3	6	5

b. Women.

	1905 s.	1905 j.	1923
Avaricious	3	2	1
Economical	56	46	49
Free-handed	29	34	41
Lavish	2	6	3
In debt	2	1	2

These figures show a marked resemblance to those concerning pleasure-seeking and going out ; the younger generation of 1905 shows a marked diminution of economy and an augmentation in liberality and lavishness, which has been compensated for in 1923. The first researchers (3) suspected

that the difference found between the two generations of the heredity-inquiry has to be attributed chiefly to the difference in age and not to a real change in the qualities of character. This seems to be well confirmed by our results. Of course, it is only just to point to the possibility, that the data of the stature-inquiry, so much more limited than the heredity-inquiry have been derived especially from the better-bred class of people, who are less fond of amusement and are more inclined to economy, and that these data are, therefore, less fit for comparison with those of the heredity-inquire, the increase of the love of pleasure as a typical feature of modern we are not justified in considering, on the basis of the results of this inquiry, the increase of the love of pleasure as a typical feature of modern times. There are facts pointing in this direction, but also others that point the other way.

In the second place we have to ascertain whether the phenomena, grouped together as the consequences of a decreased sense for reality, are again met with in the data of our inquiries. As has been stated before, these phenomena remind us of those of dementia praecox, in so far as they bear some resemblance to one of the most important symptoms of this disease, viz autism. Now, some years ago a comparison of the data of the heredity-inquiry with anamnesis of the characters of a number of people, who afterwards had contracted dementia praecox, enabled me to point out a correlation of the properties of a group of men, marked by a taciturn and solitary character, with the future sufferers from dementia praecox (6). We could recognize a number of properties, known to us, when exaggerated to a pathological degree, as symptoms of dementia praecox, in a smaller degree in the two groups examined, but more frequently than is expressed in the general percentage of the heredity-inquiry. Afterwards I was in a position to demonstrate (7) that the maniac-depressive psychosis, when occurring in taciturn, solitary men, can reveal under the influence of this type of character, remarkable peculiarities of the clinical aspect and course which remind us of dementia praecox. Now, since many characteristics of the modern mental attitude remind one of this psychosis, I think it interesting to inquire whether taciturnity and solitariness, and some qualities that show a correlation with the above-named character-types, are perhaps demonstrable among the younger generations in increasing frequency. Such qualities are timidity in company, closeness, losing oneself in abstractions, and absent-mindedness. The taciturn and solitary people often do not feel at ease in society, they do not present themselves such as they are, but are somewhat constrained in manners, which is an indication of the mannerism of many praecox-patients. Their sympathies and their antipathies, their intentions and their emotions they often keep back ; this is their closeness, which we may observe in much larger measure in cases of dementia praecox. Often the taciturn and solitary get absorbed in abstract meditations, mostly of a philosophical or a religious nature, they are apt to take a biassed view of the world, which corresponds

TABLE III.

a. Men.

	1905 s.	1905 j.	1923
Conversational	64	64	59
Loquacious	12	8	9
Taciturn	15	19	19
Interested in recreation	24	32	20
Fond of home-life	65	49	61
Solitary	6	11	14
Constrained	15	21	20
Close	35	34	43
Abstractions	15	19	34
Absent-minded	18	27	29

b. Women.

	1905 s.	1905 j.	1923
Conversational	71	70	67
Loquacious	5	6	4
Taciturn	15	15	19
Interested in recreation	19	35	23
Fond of home-life	69	52	70
Solitary	6	5	6
Constrained	17	18	13
Close	35	30	35
Abstractions	10	11	15
Absent-minded	20	19	25

with the grotesque fancies of numberless praecox patients. In fine the taciturn and solitary display a high degree of absent-mindedness, they take little notice of what happens in the world round about them, as they are absorbed in their own thoughts. The same is observed in a larger measure in dementia praecox. The procentic values for the various generations of normal men I subjoin in Table III.

It will be seen from these figures that there is a remarkable difference between men and women. The men not only show a marked increase of the two chief qualities of the type in question, taciturnity and solitariness, but also of all qualities mentioned and correlated with these two. Apparently they live less in the outer world, lose themselves more in their own thoughts and emotions than earlier generations. They are less communicative, they have become more taciturn, and more close: they keep back their intentions and emotions. Instead of taking an interest in passing events, they live in a sphere of their own, which is apparent from the more pronounced solitariness, and an increased inclination to abstract meditation. More than formerly they are absent-minded, i.e. they adapt themselves less completely to the stimuli received from the outer world; they do not feel so well at home in that outer world as people did formerly, which appears from their constrained attitude, they have lost their bearings. The same predilection for their own thoughts and emotions we could observe in the modern views of the world and the interpretations of Art and Science nowadays. Especially the tendency to abstractions is unmistakable here. As is also borne out by our figures, it is also largely increased.

Now there are also some qualities, correlated with the taciturn and solitary type, which are not increased in frequency in the most recent generation. To this class belong: suspicion, lack of wit and humour, selfishness and a deficient perceptive faculty. But at least of the first of these qualities it may be assumed, that they are also distinctly correlated with other qualities of temperament and character, while they can serve no more as types of the syndrome of dementia praecox, than as types of the spirit of our age. Something like this also applies perhaps to a weaker power of observation, but a closer inspection will have to make this out.

The figures of the women present another picture. The women have become a little less communicative¹⁾, but not more solitary. Apparently they do not feel less at ease in the world than formerly, anyhow they exhibit rather a diminished than an increased constraint in their behaviour, neither have they become closer than before. Although less intensely than among men their bias towards abstract meditations has increased, just as their absent-mindedness. So a slight shifting of the character-type in the same direction as with man can also be observed, but

¹⁾ Just as with men the rise of the percentage for taciturnity lies on the very border of what may probably be called fortuitous. As however the percentage for good conversation has fallen conformably, we feel justified in assuming in this case a fortuitous change of the number.

for women it is far less pronounced. But since in science as in art, and also as regards views of life, men generally take the lead, it cannot be surprising that this shifting of the character-type of men has expressed itself indubitably in what is commonly called the spirit of the times. I have stated already that this change does not result from the war. This appears, moreover, distinctly from the results of the inquiries which show, that the changes discussed, had begun to reveal themselves already in 1905 in the younger generation.

Although it is perhaps unnecessary, I will emphasize the fact, that this psychic change in modern man is not at all pathologic. That there exists a conformity of the taciturn and solitary character to dementia praecox patients, does not imply that the former have dementia praecox to a slight degree. The nature of the correlation of character with disease has not been fully established. It is uncertain whether dementia praecox should be considered simply as a pathological exaggeration of the taciturn and solitary character-type. Still, even if this should prove to be the case, an increase of the character-type among people in general is of no greater significance than any change of character or temperament would signify, as we know that every type of character or temperament leads in its extreme excesses to psychic anomalies.

That in our days woman accommodates herself to altered conditions in the world better than in former times, which assertion is substantiated by less constraint in her behaviour, is not surprising, as woman's position in the world has been greatly altered during the latter decennia. Ways are opened for her in every sphere of labour, in every branch of study; like man she can choose her pursuits after her own liking. Her dependence on, and inferiority to man, has entirely disappeared, and qualities, formerly considered as female virtues, such as abstaining from forming an opinion of her own, a tendency to keep in the background, and to follow the lead of man, are now looked upon as a sign of inferiority, just as they are for men. Woman could not but adapt herself to these altered social conditions, and become more independent. This is, indeed, borne out in the subjoined table (Table IV).

From this table it appears that the tendencies to repeat another's words, to keep in the background, to follow the lead of others and be overruled, formerly oftener met with among women than among men, now occur more frequently among the latter. Conversely, in our time women surpass men in regard to domination. These changes also are not of recent times, but were already distinguished in 1905. Moreover, the whole table shows, that the values for the two sexes are drawing together, which began already in 1905 with the younger generation, and is also clearly visible in 1923, although not more pronounced. In regard to these qualities, which clearly show the degree of independence, this levelling is in strictness nothing particular. It can hardly be doubted that there is a causal relation here with

TABLE IV.

	1905 s.		1905 j.		1923	
	M.	W.	M.	W.	M.	W.
Resolute	51	49	50	53	57	53
Irresolute	29	29	30	28	23	19
Independent	69	56	64	59	71	67
Parroting	13	24	20	24	13	10
Ambitious	38	25	34	30	26	20
Indifferent	24	16	26	24	19	17
In the background	19	32	16	20	28	26
Domineering	24	23	19	25	15	21
Giving full scope	55	43	53	47	67	53
Amenable	12	17	13	13	5	4
Going in for politics	12	1	7	2	6	3

the feminist-movement, though we are not quite sure where to look for the cause, and where for the effect. Is the greater independence of woman a consequence of the feminist-movement, or is the latter the result of woman's greater independence? In the first case we cannot assume a real change in men, no more than in the case of the past fear of sunclipses: people have merely adapted themselves to altered circumstances. In the second case, however, a real psychical change in woman is perhaps answerable for the feminist-movement. In order to ascertain this a closer inspection of other qualities is required. For some intellectual qualities we get the following values: (See Table V, p. 968).

From this we see that the large difference in favour of man in the younger generation of 1905 seemed to have disappeared almost completely, but that in 1923 it re-appears, although reduced to little more than one third, as compared with the older generation of 1905. Now a marked tendency to levelling of the differences between man and woman had been established by HEYMANS and WIERSMA (3) for the younger generation of 1905, especially for the secondary function, of the intellect and of most inclinations. All these groups of qualities yield the same results in 1923 as those just mentioned; the sex differences are, indeed, much smaller than for the oldest generations of 1905, but again considerably larger than for

TABLE V.

	1905 s.		1905 j.		1923	
	M.	W.	M.	W.	M.	W.
Quick of apprehension	60	49	59	57	70	66
Intelligent	60	45	51	44	60	50
Shallow-minded	13	23	18	19	6	10
Stupid	2	5	4	5	0	0
Memory :						
Extraordinary	17	11	12	8	13	14
Good	75	74	75	78	68	67
Bad	4	9	7	7	8	10

the youngest of that year. This levelling also continued in 1923 only for the qualities that point to a higher degree of independence and activity in social life. I feel inclined to conclude from this that the increase of the latter qualities is partly ascribable to the altered circumstances, anyhow for women. Better education, a wider scope of activity have given the girls more independence of judgment and attitude. Besides, also a general tendency is observable to a lessening of the differences between man and woman, which became more apparent in 1905 than in 1923 and of which the secondary character has not been identified. In connection with the new fashions in clothing and head-dress, in sport and in life-maxims we often hear people speak of the growing "masculinity" of woman. Except with respect to independence, this tendency, which cannot be other than a greater psychical likeness of the two sexes, is not increasing. Probably, however, most of these mannish phenomena among the woman-fashions of to-day may be considered as signs of an increased independence. The press contains repeated utterances suggesting that short frocks, bobbed hair, greater love of sport, are considered as such. This generally observed phenomenon is affirmed by our figures.

I am perfectly aware that much remains to be said about the spirit of our age. An inquiry into the relative frequency of the various qualities of temperament separately and collectively, into the increase or decrease of religiosity e.g., which has also been much debated, would no doubt yield interesting results. I believe, however, that in themselves the results discussed justified a publication. They may be summarized as follows :

10. Increasing love of pleasure cannot be considered as a typical mark of our time.

20. Many peculiarities of modern thought, which may be considered as a lessened sense for reality, are easily comprehensible through the greater

frequency of the taciturn and solitary character-type, which is especially notable in man.

30. In psychic qualities the woman of our time differs, broadly speaking, less from man than formerly. This levelling is most pronounced and most constant in regard to qualities that point to greater independence, and is as such decidedly partly a consequence of the feminist-movement.

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