



Roots of Friendship: Socio-Behavioral and Psychological Foundations of Male Alliances

Juri Plusnin

Department of Social Sciences, National Research University, Higher School of Economics, Moscow, Russia

Email address:

juri.plusnin@gmail.com

To cite this article:

Juri Plusnin. Roots of Friendship: Socio-Behavioral and Psychological Foundations of Male Alliances. *American Journal of Applied Psychology*. Vol. 6, No. 5, 2017, pp. 110-117. doi: 10.11648/j.ajap.20170605.15

Received: January 14, 2017; **Accepted:** February 23, 2017; **Published:** October 23, 2017

Abstract: The summary paper argues that the phenomenon of male alliance (friendship) emerges as a consequence of mutual preference demonstrated by male individuals - both human and animal, - and such preference can be empirically captured. Friendly relations between men are built on two different foundations: (1) the principle of biological and social similarity and (2) the principle of psychological complementarity of the alliance members. Friendship is predominantly formed between boys and men of the same ethnic (racial) origin, similar age, behavior, and common social background. By contrast, psychologically friends are selected based on the complementarity of their temperament and main personality traits, such as ergonicity, sthenicity, emotionality, neophobia/neophilia, extraversion/introversion, dependence/independence of behavior, and dominance/submissiveness. These principles trigger the following key effects: a person is more likely to develop an individual preference and find a friend in childhood, and the number of potential friends is very limited.

Keywords: Male Alliance, Friendship, Individual Recognition and Preference, Similarity, Complementarity, Sociobiology of Friendship, Psychology of Friendship

1. Introduction

I have been investigating the sociobiological, behavioral, and psychological bases for friendship for quite some time. Studying and describing alliances formed by male rodents (mice, rats, and voles) in nature and in laboratory was the starting point [1]. At the same time (in the 1980s-1990s), I was studying the social behavior of children - infants and preschoolers. Behavioral studies of children produced an important result. At a very early age - in the first year of life - boys already manifested substantial mutual preferences which were objectively expressed by proximity; girls did not reveal such preferences [2]. This empirical sociobiological research of alliances formed by male rodents and spatial preferences demonstrated by boys urged me to study the roots of male friendship. Respective findings have been published in several works [3]. This text has been prepared on the basis of my earlier sociobiological and ethological research of alliances and subsequent psychological studies of friendship among boys and men [4]. The subject of this paper is the behavioral and psychological foundation of friendship, which many perceive as a purely sociocultural phenomenon.

I attempt to show (primarily on the basis of my empirical records) that friendship is deeply rooted in biology. I focus solely on male friendship as a phenomenon keener and more pronounced in manifestation, more emphatic than female friendship (which I believe should be interpreted in terms of relations based on love - "love or friendship makes no difference!" A. S. Pushkin).

The nature of friendship is obscure, as is almost always the case with familiar and therefore seemingly obvious phenomena. Every one of us has a hundred or so pals and acquaintances. Our close relatives include at least a dozen people. However, our true friends can be counted on the fingers of one hand (although many people have nowadays acquired thousands of "fellow friends" in social networks, but are they actually friends?). Many lack even this, and yearn their entire life for a true friend without ever finding one. Everyone who does have a friend, cherishes him and is afraid of losing him. Why then do we have so few friends? After all, similarly to other things, everything should be vice versa - having so many pals and seeking a friend among them should enable everyone to accumulate friends as the most precious treasure (a Russian proverb says, "Rather have a

hundred friends than a hundred rubles" [A friend in court is better than a penny in purse]). However, I do not know a single person who would venture to say that he has a hundred faithful friends. It is impossible. Why? I will try to provide an answer to this question.

2. Choice and Preference

Friendship is perhaps the second most important topic after love featured in contemporary stories and novels, ballads and odes of the past, ancient chronicles and sagas, lives of the saints and biographies of great personalities. Some mysterious signs compel us to state without doubt a link between two souls which we call true friendship, regardless of differences between the friends. Any attempt to identify the behavioral and psychological roots will not answer the question as to why everyone needs a friend, but will at least allow to understand how and what friends we choose. "Choice" is the key term.

As a prerequisite, any choice implies preference – before choosing one must first prefer something to lots of other similar things. Many researchers have already long ago included individual recognition and associated preference in fundamental biological concepts regarded as attributes of life [5]. Indeed, it is these attributes that determine the essence of biological interactions on the molecular, as well as the organismic, and even social level. Any interaction is possible only due to specific (in the extreme case - individual) recognition and preference. All processes in the cell, tissue or organ begin with recognition and preference of some molecules to others, some molecular conformations to other ones, even very similar in structure (e.g., immunity and allergy as processes based on "individual", specific recognition, preference, and errors). Just maintaining physical existence in any form is impossible without preference. And this applies not only to procuring food, but also to procreating; not only to avoiding danger, which is easier done together than alone, but also to delighting the soul, which is achieved through shared activities, playing, conversation, idleness, and entertainment. Thus, preference is a fundamental biological (and not only) phenomenon.

Obviously, there are different levels of preference. Preferring a certain food or smell is not the same as preferring another person. Though outwardly a person may manifest such preferences by similar behavior. However, there is a general principle for any preference which is expressed by the Latin proverb "similis simili gaudet". And this despite the fact that preference for the opposite ("opposites attract") is what usually draws our attention. We just often tend to forget that in fact the preferred opposites are mutually complementary, and one does not exist without the other (as the oppositeness of man and woman, senseless in its singleness).

Once similitude is preferred, similitude is also chosen. Therefore, people similar not only in spirit, but also in "body" become friends. What outward, physical (i.e. behavioral) semblance criteria underlie such a choice? They

are few, but together they make the choice in fact individual and singular, unique: (1) preference for a representative of one's ethnicity; (2) preference for a relative (member of a family group); (3) preference for an individual of the same gender and (4) age; (5) preference for a member of the same social group (see explicitly [6]).

In the meantime, such preference for similarity is absolutely insufficient. This is only the first prerequisite. The other prerequisite is psychological compatibility, but compatibility of a special kind - based on complementarity rather than semblance. Let us consider these two prerequisites: preference for similarity and psychological complementarity that, in my opinion, together constitute the necessary and sufficient condition for male friendship.

3. Sociobiological and Social Foundations of Friendship

No one contests that similarity, semblance are the foundations for close personal relations, especially when it comes to male alliances, or male friendship. However, the reason for mutual preference between people with particular social characteristics can be described by an empirically captured principle, which is known as "Koenig's Rule": kinship and spatial proximity are interrelated and interdependent. As a rule, people leaving in the neighborhood are relatives, and relatives are usually neighbors. This is a long established fact in ethology [7], population genetics [8], and sociology [9]. Kinship and physical proximity also determine the social features of the people participating in the intimate process of mutual recognition – those who can become members of one alliance or friends. Different degrees of preference for individuals from among "us" establish a hierarchy with the personal choice of the one and only (unique) friend at the top. Let us see how the system of individual preferences is established.

(a) "We be of one blood..." The most notable preference is the one for a representative of the same species and the same family group. Both are interrelated. An animal or a human being establishes a preference for one's own species at an early age, with relatives serving as an example (primarily siblings — members of the same litter or brood). Both these forms seemed so obvious that scientists did not even consider the issue worth discussing. Therefore, preference for relatives has been a topic of extensive discussion in socio-biological literature only since the early 1980s. At that time, the first experimental works appeared (they are now numerous), which proved the ability of various (including quite primitive) animals to recognize and prefer relatives, and discussed the biological grounds of this phenomenon [10].

Recognition and preference of a close relative is biologically determined, i.e. has genetic roots, or it is imprinted at an early age; both mechanisms are likely to be acting at the same time [11]. The tiniest external indicators, minimum odor differences, and nuances of behavior suffice to recognize "one of us". Similar to other animals, it takes a

human being one glance to distinguish representatives of different ethnic groups, not to mention representatives of different races. Like most mammals, people also use the sense of smell (although it is underdeveloped) for recognition and preference (indeed, those for whom olfaction is one of the main sensors are able - like mice - to distinguish odor nuances, which are coded by different alleles of the same gene).

Since recognition and preference of one's species and relatives is very deeply rooted, people do not generally realize it in everyday life. They note the fact of preference or avoidance by such words - definitions as "like - don't like" or "us - them" without thinking about the criteria of their choice. In this case they are governed by their belonging to a certain species and ethnicity by blood [12]. Therefore, this form of preference does not even require discussion - it exists as an invisible basic component of every instance of interaction and preference.

(b) The roots of "male solidarity". Preference for individuals of the same gender is not as vivid, instinctive, and obvious. In the case of adults, it is strongly veiled by preference for the opposite sex. Nowadays, when there is no longer any gender differentiation in everyday life (at home) or in public interactions; when many occupations have lost their previously inherent gender basis, and people spend much of their working time in heterosexual teams, preference for representatives of the same gender is not at all obvious. Meanwhile, this is the case. And above all it applies to men.

Although the opposite sex is attractive to every one of us, close scrutiny reveals that we invariably prefer people of our own gender. Little boys express this especially vividly. However, the same preference is manifested by adolescents and young men, although they are at an age of puberty when hypersexuality and attraction to the opposite sex develop. Yet, when we are not on a date and are not carried away by the first or new feeling for the "fair" or "stronger" sex, with whom do we prefer to spend the time? Without doubt, we prefer to play, drink a glass, chat, go to a club, sauna, beauty parlor or hypermarket with a companion of the same sex.

Apparently, preference for one's gender is as deeply rooted as preference for a relative. At least, humans demonstrate it already at the age of one a half, notably, only boys (our data, see: [2]). This pattern of behavior is further traced from the age of four to seven, whereas girls do not demonstrate any significant preference for their own gender until school age (or we observe it very rarely). The girls' preference is not true, but seeming - in heterosexual groups (on the playground, in kindergarten or at school), boys "flock" together, so the girls are forced to form their own "society". Girls start demonstrating real noticeable mutual preference only by adolescence.

Such explicit and persistent differences in sexual preferences seem absolutely inexplicable. Like other researchers, I have no rational hypotheses on this account (experts in evolutionary psychology may easily invent the casuistry, if they have not already done so). Nevertheless, we can draw some conclusions from this fact (although if

desired, they can be interpreted as male chauvinism rather than the manifestation of research spirit). For example, we may reasonably assume that the natural mutual attraction of male individuals promotes solidarity among members of the society and thus ensures social cohesion. In other words, the phenomenon of male alliances - as a basis of social solidarity - may be an important factor underlying social life. Consequently, we could argue that that male friendship is rooted in the natural foundations of our social life.

I also doubt that male and female friendship are identical. Where affection between men is more of a natural character and manifests itself at a very early age, affection between women can be attributed to cultural factors. Ancient and modern writers alike - followed by researchers - note that when left to themselves, men in a group of friends quickly fall into adolescent behavior experiencing from it an atavistically deep sense of emotional satisfaction (e.g.: [13]). Female groups demonstrate nothing of the kind. Female friendship - of course purely in my personal opinion [14] - is more like love, and this is what distinguishes it from male friendship.

Meanwhile, historically, these differences between male and female friendship are captured in rituals. Although in many aspects ritual forms of establishing friendship are similar for males and females, certain essential features differ cardinally. For example, in archaic and traditional societies only men could become blood brothers in a ceremony of letting and exchanging blood (by pressing together cut wrists or fingers; smearing one's blood on the face and hands of the other; tasting the "brother's" blood, etc. - in Russia, this ceremony still exists in some subcultures). By contrast, the rite of kumovaniye (establishment of symbolic kinship through adoption of a child) did not allow women to exchange valuable and vital items, whereas among men this was widespread or even considered obligatory [15]. The ritual of establishing friendship between women was accompanied by an exchange of symbolic items - amulets, small icons, crosses, branches, and food of a sacral nature (eggs, pies, etc.). Finally, as far as we can judge by ethnographic data, the ritual of kumovaniye was performed between women of one village or community, whereas in the case of men, both kumovaniye and brataniye (the ceremony of becoming blood brothers) often included men from other villages and tribes [16]. (As we know from the texts of Hellenic authors, male friendship was known even between representatives of warring nations, for example, between the Greeks and Scythians [17].)

All these aspects, which indicate the difference not only in nature, but also in the social canons of friendship between men and women, can be united to form a certain primitive evolutionary hypothesis. Obviously, the extra-tribal nature of the institution of friendship, which extended beyond one community, was important and necessary primarily for men. They had to protect their village and tribe regardless of the kinship of its members. Their primary task was to ensure sustainability of the community, both by providing the required resources and keeping peace with the neighbors.

This makes it clear why members of other tribes were included in the friendship ritual, and why such rituals always attributed great importance to the friends' symbolic kinship, which was established through exchange of blood and valuable presents — vital or sacral items.

Women occupied a different position in virtually all archaic and traditional societies. If they did not remain in their village or tribal group (which was rare), they were "married" off to another village already in childhood; there, they adopted the behavior patterns and outlooks of an unfamiliar society. A woman was not only the keeper and bearer of village knowledge and customs; due to the geographic and environmental distinctions of the community (which is especially characteristic of tropical and subtropical areas), she acquired the knowledge and skills, which reflected the way of life under these specific conditions. For this reason, even young women, being the main gatherers of edible and medicinal herbs, had very little chance of adapting to new conditions of life in another society, another village. Unlike men, active age women in archaic societies virtually never moved from group to group or from village to village [18]. Therefore, friendship rituals between women could only be intra-tribal.

Meanwhile, the fact that friendly relations between women are limited to their kin group explains only the sociocultural differences in male and female friendship, but does not clarify why male relations and preferences occur at an earlier age and are more stable than female ones. Since a similar situation is observable not only for higher primates, but for other mammals as well, we can only assume that this is due to ethological and genetic mechanisms resulting from selection [19].

(c) Every age has its pastimes. For adults, age is not an essential factor in communicating, but for children and adolescents it is by far more important: a six-month difference at the age from two to five makes joint games and communication between children virtually impossible. Although seniors are attractive for children, adolescents, and young men alike, such communication almost always excludes equality in relations, which is absolutely indispensable in friendship. The younger the child, the narrower the age range of his fellow peers.

The biological relevance of preferring peers is obvious; it is clearly manifested in the behavioral repertoire, which in humans, as in other animals, greatly varies with age. In relations with juniors, seniors can only act as leaders or instructors, but rarely as partners in games or communication. Since skills, competencies, the ability to understand the social code, assume roles, participate in rituals, and so on are highly dependent on age, the age preference, which in infancy and childhood is clearly caused by biological factors, in adulthood passes predominantly under social control. But somewhere in the depths of our soul we forever retain this childish attachment to the peer, and we instinctively choose and prefer someone of the same age.

We are not alone in this respect. Age discrimination is widespread in animal populations. In a community (deme,

local population), groups of males and females of the same age exist as separate social units, with each of them occupying a specific place in the structure. This functional division of the community by sex and age has a direct adaptive value (ensuring the effective use of resources and maintaining a stable social structure) and a future value (as an ethological mechanism of maintaining the reproductive potential of the population). Such a consistency allows us to assume that preference for the same gender, as well as for the same age has sociobiological roots.

(d) "Us" and "them". The described types of preference are in one or another way determined by genetic mechanisms. But preference for a member of one's community who is often neither relative nor peer must be based on sociobiological and sociocultural recognition criteria. Such criteria exist since ages. They can be classified into two big groups.

Due to many purely population genetic reasons, the anthropological appearance of most members of relatively isolated small communities with low migration (virtually everywhere and in all cultures) is very similar ("as like as two peas") [20]. The similarity is completed by the dialectal features of the language, which form the unique phonetic and phraseological speech characteristics in each area and village. The external anthropological similarity in old towns and villages, which still catches the eye of visitors, is complemented by various social marks (tattoos, deformed parts of the body, tradition of decorating the head and limbs, "folk" clothes) that indicate an individual's affiliation with a certain community or society. For the most part of human history, marks as determiners of social origin played a major role. Now, with the development of transport and informational communications, as well as migration, this mechanism has almost lost its significance (although in recent years it has been re-emerging due to social networks which have rekindled subcultures).

The enormous variety of social marks that indicate a person's sex, age, reproductive capacity, occupation, class, caste, and, of course, subcultural marginality has historically served the one and only purpose – to indicate the affiliation of the individual with a particular community and particular group. When "one of us" cannot be identified by external biological features or by the language and behavior, only such social marks work.

Thus, recognizing and preferring a member of one's society occupies an intermediary position between a purely biological and psychological, individual preference for a person whom you wish to have as a pal or friend.

The given forms of preference, at whatever classification level they distinguish the object of preference — racial or ethnic level, age and gender or related social group — have an immediate value for individual preference, which alone eventually leads to friendship. Thus, friendship (between men) implies a successive preference for individuals from a certain population: first, individuals of the same nation, ethnicity; then — of the same sex and age; and finally, of the same community (later — the same socio-occupational and

cultural group). Here, the words of Plato would be appropriate: "As long as you are friends, you are by nature related to each other" [21]. Natural similarity, or kinship, is a prerequisite for friendship. Note that preference for a relative, especially a close one, falls out of this selection for psychological reasons: by status, a relative very rarely becomes a friend, although performs many of his functions. A friend must be "one of us" but not a relative (the disjunction captured in Vladimir Vysotsky's song is clear and apparent: "he is neither friend, nor relative...").

So, the first pre-requisite of male friendship is the friends' similarity by external features (biological and sociocultural). Anyone can certainly provide numerous examples contesting the above, but they would be exceptions that prove the rule. This pre-requisite significantly narrows the circle of potential friends. However, this circle is still rather numerous, especially in the contemporary world. Nevertheless, a true friend is very hard to find.

4. Difference of Personality Traits as a Foundation of Friendship

However, it appears that the psychological prerequisite of friendship is at variance with the Pythagorean statement that "Friends share all things". If as biological individuals we prefer and choose each other from an already predetermined group, and the sociocultural environment forces us to narrow down even further the circle of people from which we select, psychological preference is unique and gives us true freedom of choice. On the backdrop of external physical (biological) and social conditions, we establish an individual preference which requires that people mutually choosing each other be psychologically compatible. What psychological traits must friends have to be mutually selected?

To answer this question, I carried out several special studies among groups of adult men, male students (18-24 years old), and preschoolers in the senior groups of kindergarten (5-6 years old). Empirical studies - especially insider research of the psychology of interactions in isolated male groups, which I conducted during fieldwork in the Arctic - where I could analyze in detail the set of personal traits of each individual, show that friendly relations are established and formed between men subject to certain combinations of individual personality traits [22]. Preschool boys were observed in mixed kindergarten groups during free playtime. Such observations had the objective character of socio-ethological studies; therefore, only those traits of temperament and character were recorded that had a substantial genetic component and determined the psychological type and individual pattern of behavior [23]. In contrast, psychodiagnostic studies of male students included only batteries of psychological tests and questionnaires and excluded any objective ethological tests [24].

Nevertheless, this mixed data array produced similar results in the following. Friendly relations (male alliances) were established between pairs (rarely – trios) of boys,

youths or adult men in such a way that the individuals in the pair complemented each other by some essential traits of the temperament and personality.

I identified only several significant personality traits, but they are fundamental. They include the type of temperament by level of sthenicity, plasticity, tempo, and emotionality; the emotional status; neophobia / neophilia (focus on novelty and exploratory activity); communicative activity determined by sociability / aloofness; dominance; and dependence / independence of behavior. As you can see, these are in fact the main components of the Big Five personality traits [25], and, of course, the four temperament traits [26].

It is noteworthy that friends (members of the alliance) did not resemble each other by any of the indicated personality traits. On the contrary, their temperament and personality traits either matched only partially or were even opposite (in the latter case, especially such genetically determined traits as emotionality and dominance).

Emotionality, largely resulting from the dynamic components of the temperament, is of great importance in determining the type of behavior, i.e. the propensity to a particular social strategy, to a certain style of life and relationships [27]. In almost all cases, the men and boys in friendly pairs were opposites by emotional status: if one member of the pair was emotionally stable, the other one was emotionally labile, unstable.

Emotionality is associated with an individual's sociability, and both these traits determine whether the person is focused on the world of external objects or on the inner subjective world (extraversion-introversion, as well as neophobia / neophilia - a relatively independent genetically determined trait). Therefore, one of the friends is generally more likely to be an extravert, whereas the other one – an introvert (since this factor is represented by several personality traits rather than only one, psychological complementarity here is not as obvious and clear as in the case of the emotional status). Similarly, reserved (with low communicative activity) individuals are more often closer associated with sociable people than with their own kind.

Preference of one's opposite by such trait as dominance is as pronounced. An individual who seeks to impose his behavior on others, i.e. strives to be a leader and is capable of becoming one, surprisingly often forms an alliance with a person who prefers to accept the conditions of others, who is subdominant or even tends to be submissive. This is quite clearly traced in groups of adult men, particularly obvious in groups of small boys; and significantly recorded among male students based on psychodiagnostic questionnaires. Such alliances appear to be the most stable and long-lasting. It sometimes even seems that this dominance or submissiveness - a personality trait which determines the individual's place in the social hierarchy - may be the essential psychological criterion when selecting the alliance partner or friend. (By the way, I would like to emphasize that dominance is furthermore directly associated with the emotional status of the individual).

The fact that members of friendly pairs, or alliances,

clearly differ by dominance requires substantiation; the more so that this also affects other traits of temperament and character. I would like to suggest a simple hypothesis. Dominant individuals almost always have a slightly reduced level of exploratory activity (clear indications of neophobia). Unlike their less dominant partners, they are not so much attracted by everything new and have no big need for "thrills". Even in children's groups such dominant boys seldom have developed skills and abilities; they are less inclined to learn and prefer to "run the show". This instrumental and intellectual ineptitude and lack of high exploratory motivation are offset by the early development of "leadership skills". In every community or group the dominant individual focuses primarily on socio-regulatory functions; in a sense, he is responsible for maintaining social stability. Due to his social nature he must be conservative and avoid everything new - dangerous for the sustainable existence of the community. But new developments inevitably appear, and they are appealing. It is necessary to understand and learn to deal with them. For this purpose there are other individuals who are generally characterized by high exploratory motivation and the desire for "new experiences" - in other words, they have a thirst for everything new. However, such people rarely dominate, but they are often the friends of dominant individuals. (Incidentally, such relations between dominant and subdominant individuals have long been described in the classic study of primates [28]).

Thus, an alliance where each member is focused on the opposite: one - on regulating internal social functions, and the other - on perceiving new exposures and dealing with them - is an efficient and effective social structure that provides the best community or group management. Close relations between members of the alliance allow exchanging information about the internal state of the community and the external environment quickly, cost-effectively, and, above all, without loss or distortion inevitable in other cases. The shorter and "less formal" the communication channel, the more reliable and timely the decisions made.

My own observations show that individuals with different statuses form such alliances in almost all communities or small groups of adults and children. Indeed, they do not always develop into friendship, but are undoubtedly its prerequisite.

5. Conclusion

Identification of the two groups of factors that determine the possibility of forming an alliance between men was made by myself first on the basis of observations on the behavior and interactions between individuals of very distant paired objects - male rodents and infants and little children. These observations revealed individual preferences within the groups of males: between males of rodents species, and between boys in mixed gender groups of children. Secondly, the preferences and the subsequent formation of an alliance takes place between friends who had grown up together in

the same conditions, and share similar features of social behavior (males and children). Thirdly, it was found out that within the established pair alliances differences between individuals occur on the basis of their temperament and personality traits.

Further to verify these observations, I made several series of experiments with adult men. In one case it was a group of men isolated for a long-term stay in the Arctic. In the situation of direct involvement the observer easily recorded paired alliances that were formed, and the members of these alliances could be studied further in detail using behavioral and psychological tests. In another case, it was a group of randomly assembled young men who have been interacting between each other for a long time. The latter study was conducted mainly using psychological methods. In both cases I confirmed the presence and the opposite vectors of the initially identified two groups of factors, i.e. socio-behavioral and psychological.

Finally, it is possible to suggest a model on determination of friendship factors in males. It looks like a simple two-dimensional diagram with orthogonal axes (see. Figure 1). One axis (for example the Y-axis) represents the impact of social and behavioral factors. The higher the similarity of individuals in any random pair of social and behavioral characteristics (attitudes, concepts, superstitions, customs, norms, stereotypes, and patterns of behavior), the higher the probability of their mutual preferences and the formation of an alliance between them, and the development of male friendship on this basis in future. The orthogonal axis (X-axis) represents the influence of individual psychological factors. The higher the similarity within random pairs of individuals in temperament and basic personality traits, the less likely they would prefer each other. And vice versa, the bigger the difference in their individual psychological traits, the more likely it is for them to form an alliance and develop male friendship.

In this model, the probability of a friendship alliance between men is definitely possible only in one case: the similarity of their socio-behavioral characteristics and difference (complementarity) of individual psychological traits (quadrant 1).

Opposite combination of features (difference in social and behavioral characteristics, but the similarity with respect to individual psychological traits; quadrant 4), and discrepancy between individuals on one or the other group of characteristics (both in socio-behavioral, and in individual-psychological; quadrant 3) definitely prevents formation of an alliance between these individuals. On the contrary, with the largest similarity of individuals on both groups of factors (quadrant 2), one cannot give a definite answer whether an alliance in this case is possible or not. I suppose that this model of the «factors that determine male friendship» may have an operational prognostic potential. In the very utmost case, estimates of the probabilities of alliances in any pair of male individuals with various combinations of social, behavioral and psychological could be calculated.

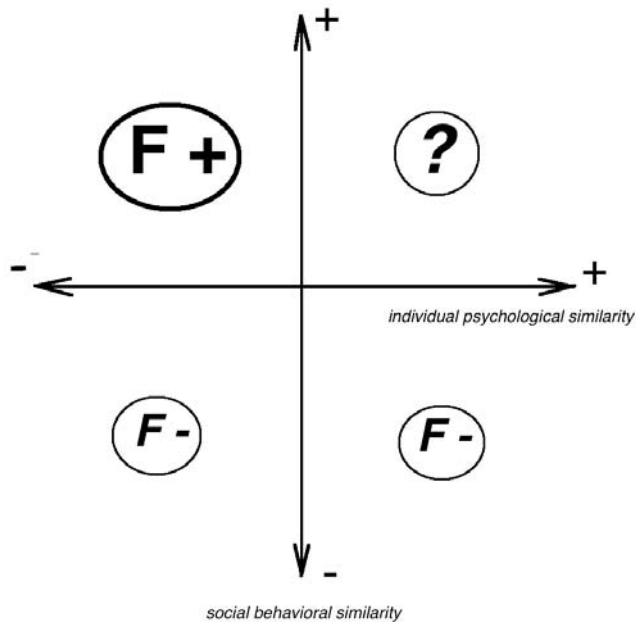


Figure 1. The two-axial model of the «factors that determine male friendship». Clarifications are in the text.

Thus, a friend or the closest person in a group of individuals (member of an alliance of two-three men) differs from the partner by his personality traits, temperament, by his soul. In a sense, a friend makes up for some important qualities that we lack: any trait of character unilaterally manifested in a particular person becomes full and complete in a friendly alliance.

Indeed, not everyone will agree with the assertion that friends differ psychologically. However, I would like to emphasize once again that the friends' psychological difference does not apply to all traits of character; it concerns primarily the few ones that are genetically determined. You should not necessarily expect your friend to be a pragmatist if you are a dreamer; nor must you be radical if he is conservative. In a friendly relationship mutually complementary traits of character are the ones that are least affected by education or social correction. Consequently, we find sociobiological roots of friendship even in the field of psychology.

Going back to the first part of our study of friendship – the absolute and necessary semblance of individuals when selecting the principal external – biological and social – characteristics, I would argue that at least in part I have answered the question as to what friends we choose of all the available options.

Concisely, my answer is as follows: when selecting a friend, we choose from among "us" those few who are similar to us; of these, we choose like-minded people; and from among the latter – only those who do not resemble us by certain essential traits of the character and by temperament. However, as soon as all the necessary conditions are met, it becomes clear how small the chance is to find a true friend. The one and only. A friend of whom Lucian of Samosata long ago wrote so well [29].

References

- [1] Plusnin J. M. & A. A. Putilov (1983) Social synchronization behavior in voles // Social behavior of animals, M., Vol. 2. P. 73-75.; Plusnin J. M. & V. I. Evsikov (1985) Seasonal differences in the social organization of water voles // Ecology, No 3. P. 47-55; Plusnin J. M. & V. G. Rogov (1986) Search activity and hierarchical rank of the individuals in a fluctuating population of water voles // Issues of the Siberian Branch of the Academy of Sciences of USSR, Novosibirsk, No 1(5). P. 67-70; Plusnin J. M. & M. A. Potapov (1990) Alliances and group dominance in water vole, *Arvicola terrestris* L. // 5th Meeting of Soviet Theriology Society, M., Vol. 3. P. 50-51 (all in Russian).
- [2] Slobodskaya H. R. & J. M. Plusnin (1987) Intragroup mechanisms of socialization in infants // *Voprosy psichologii* (Issues of Psychology), No 3. P. 50-57 (in Rus.).
- [3] Plusnin J. M., O. A. Bogatyreva, & O. E. Bichenkova (1993) Spatial behavior and social status of the child in kindergarten // *Voprosy psichologii* (Issues of Psychology), No 2. P. 106-116 (in Rus.); Plusnin J. M. & M. A. Sadovoj (1994) Social psychological features of children with vertebral pathology // *Russian Traumatology and Orthopedics*, SPb, No 3. P. 51-62 (in Rus.); Butovskaya M. L., & J. M. Plusnin (1995) Principles of the organization of spatial behaviour of human and non-human primates (comparative analysis) // *Modern Anthropology and Genetics. Problems of Human Races*, M. P. 91-144 (in Rus.).
- [4] Plusnin J. M. (1993) What kind of friends we currently choose? (Sociobiology of friendship) // *Priroda* (Nature). No 7. P. 75-83. (in Rus.); Plusnin J. M. (1996) Specific human behaviour in the Russian Arctic // *Management, technology and human resources policy in the Arctic (the North)*. — Kluwer Acad. Publ. (The Netherlands). P. 449-453. Plusnin J. (2001). *Measuring of Friendship // New challenges in assessment. The 6th Conference of the European Association of Psychological Assessment*, Aachen, Germany, September 2-5. P. 70-71.
- [5] Hamilton W. D. (Ed.) (1996/1963) *Narrow roads of gene land*. Vol. 1, Evolution of social behaviour. Oxford: W. H. Freeman. (Originally published in *American Naturalist*, 1963, No 97, p. 354—366.); Hamilton W. D. (1970) Selfish and spiteful behaviour in an evolutionary model // *Nature*, No 228, P. 1218-1220; Lewontin R. C. (1972) The apportionment of human diversity // *Evol. Biol.* No 6, P.381—398; Engelhardt V. A. (1977) Some attributes of life: the hierarchy, integration, recognition // *Modern science and materialist dialectics*. M. P. 328-350 (in Rus.).
- [6] Hamilton W. D. (1964) The genetic evolution of social behavior, parts 1 and 2. // *Journal of Theoretical Biology*, No 7, p. 1-51; Harpending H. (1979) The population genetics of interactions // *American Naturalist*, No 113, p. 622—630; Foster J. W., & R. R. Sharp (2002) Race, ethnicity, and genomics: social classifications as proxies of biological heterogeneity // *Genome Res.*, No 12, p. 844—850.
- [7] For example: Lorenz K. (1965) *Über tierisches und menschliches Verhalten* (gesammelte Abhandlungen, Band I, II). Munchen: Piper; Eibl-Eibesfeldt I. (1989/1984) *Human ethology*. New York: Aldine de Gruyter.
- [8] For example: Cavalli-Sforza L. L., & W. F. Bodmer (1999/1971) *The genetics of human populations*. Mineola, NY: Dover; Rushton J. P. (1989) Genetic similarity, human altruism, and group selection // *Behavioral and Brain Sciences*, No 12, P. 503-559.

- [9] For example: Habermas J. (1998) *The inclusion of the other: Studies in political theory*. Cambridge, MA: MIT Press.; Plusnin J. M. (2013) "Locals" and "alien" in Russian provincial town // *Mir Rossii* (World of Russia), Vol. 22, No 3. P. 60-93 (in Rus.).
- [10] Breed M. D., & Bekotf M. (1981) Individual recognition and social relationship // *J. Theor. Biol.* Vol. 88, No 3. P. 589—593; Sherman P. W., & Holmes W. G. (1985) Kin recognition: issues and evidence // *Fortschritte der Zoologie*, No 31, P. 437-460; Brown R. E. & Macdonald D. W. (1985) *Social odours in mammals*. - Oxford University Press, Oxford; Bruce V. & Young A. (1986) Understanding face recognition // *Brit. J. Psychol.* No 77, P. 305-327.
- [11] Barnard C. J., & Burk T. (1979) Dominance hierarchies and the evolution of «individual recognition» // *J. Theor. Biol.* Vol. 81, No.1. P. 65— 73; Fletcher D. J. C., & C. D. Michener (1987) *Kin recognition in animals*. N.-Y.: John Wiley & Sons, Inc.; Holmes W. G. (1988) Kinship and the development of social preferences. P. 389-413. In: *Developmental psychobiology and behavioral ecology* (Blass E. M., ed.). N.-Y.: Plenum Press.
- [12] F. K. Salter (ed.) (2002) *Risky transactions. Kinship, ethnicity, and trust*. Oxford and New York: Berghahn; Levy G. D. (2000) Individual differences in race schematicity as predictors of african american and white children's race-relevant memories and peer preferences // *Journal of Genetic Psychology*. Vol. 161. No 4. P. 400-419.
- [13] Plusnin J. M. (2013) Behavioral and psychological person's features in the North. Social psychological researches of the Marine Arctic Complex Expedition // *Franz Josef Land. M., Paulsen*. P. 629-643.
- [14] Plusnin J. M. (1993) What kind of friends we currently choose? (Sociobiology of friendship) // *Priroda* (Nature). No 7. P. 75-83. (in Rus.).
- [15] See: Propp V. (2009/1928) *Morfologia skazki* [Morphology of the Folktale (Publications of the American Folclore Society) 2nd Edition. The American Folkllore Society and Indiana University].
- [16] Berndt R. M., Berndt C. H. (1999) *The World of the First Australians*. Canberra; Artemova O. Ju. *Personality and Social Norms in the Archaic Society*. M.: Nauka (in Rus.).
- [17] Herodotus (2013). *Herodotus: The Histories: The Complete Translation, Backgrounds, Commentaries*. Translated by Walter Blanco. Edited by Jennifer Tolbert Roberts. New York: W. W. Norton &. Book III. Talia. Chapter 8; Book IV. Melpomena. chapter 70.
- [18] Belkov P. L. (2013) *Australian Kinship Systems. Basics Typology and Elementary Transformations*. SPb: Nauka. 167 p. (in Rus.).
- [19] Rushton, J. P. (1989). Genetic similarity, human altruism, and group selection // *Behavioral and Brain Sciences*, No 12. P. 503-559; Parsons, J. (1998). *Human population competition: The pursuit of power through numbers*. Lewiston, NY: Edwin Mellen Press.
- [20] *Risky transactions. Kinship, ethnicity, and trust* (2002). F. K. Salter (Ed.) Oxford and New York: Berghahn; *Welfare, ethnicity, and altruism. New data and evolutionary theory* (2002) F. K. Salter (Ed.). London: Frank Cass.
- [21] Plato (2006) *Works in four Volumes*. Vol. I. P. 339 (in Rus.); see also: Plato (1989) *Plato's Dialogue on Friendship. An Interpretation of the "Lysis", with a New Translation*. Translated by David Bolotin. Cornell University Press: Ithaka. 232 p.
- [22] Plusnin J. M. (1992). Psychology and behaviour of small groups in the Arctic: to "polar person" prototype // *International J. of Psychology*. Vol. 27. No 3-4. P. 357-358; Plusnin J. M. (2013) Behavioral and psychological person's features in the North. Social psychological researches of the Marine Arctic Complex Expedition // *Franz Josef Land. M., Paulsen*. P. 629-643.
- [23] Plusnin J. M., O. A. Bogatyreva, & O. E. Bichenkova (1993) Spatial behavior and social status of the child in kindergarten // *Voprosy psichologii* (Issues of Psychology), No 2. P. 106-116 (in Rus.).
- [24] Plusnin J. M. (1992). Psychology of youngsters selected different ways to adult life // *International J. of Psychology*. Vol. 27. No 3-4. P. 358-359.
- [25] For example: Goldberg L. R. (1981) Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 2. P. 141-165). Beverly Hills: Sage; Goldberg L. R. (1992) The development of markers for the Big-Five factor structure // *Psychological Assessment*, No 4. P. 26-42; Hogan R. (1986) *Hogan Personality Inventory manual*. Minneapolis, MN: National Computer Systems; Shmelyov A. G., & Pokhil'ko, V. I. (1993) A taxonomy-oriented study of Russian personality-trait names // *European Journal of Personality*, No 7.
- [26] Rusalov V. M. (1997) *Oprosnik formal'no-dinamicheskikh svoystv individual'nosti. Rukovodstvo*. [Questionnaire of formal-dynamical properties of individuality. Manual]. Russian Academy of Sciences, IPAN Press: Moscow. [in Russian].
- [27] Rusalov V. M., I. N. Trofimova, & W. Silus (2007) *The Structure of Temperament and its Measurement*. Toronto, Canada: Psychological Services Press. 150 p.
- [28] Pribram K. H. (1962). Interrelations of psychology and the neurological disciplines. In: Koch S. (ed.) *Psychology: A Study of a Science*. Vol. 4. Biologically Oriented Fields: Their Place in Psychology and in Biological Sciences. New York, McGraw-Hill. P. 119-157. (Citation from: Pribram K. H. (1971). *Languages of the Brain. Experimental Paradoxes and Principles in neuropsychology*. Prentice-hall, inc. Englewood Cliffs, New Jersey (in Rus. Edition, 1975, p. 227-230).
- [29] *Toxaris, or Friendship (Toxaris vel amicitia)*. Lucian with an English translation by A. M. Harmon in eight volumes. Vol. V. L.: W. Heinemann; Cambridge, Mass.: Harvard University Press. 1913, P. 101-208 (<https://archive.org/details/lucianhar05luciuoft>).