

COLLECTIONS OF GEOLOGICAL SCIENCES AND THEIR IMPORTANCE

TVORBA A VÝZNAM GEOLOGICKÝCH SBÍRKOVÝCH FONDŮ

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Abstract

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Collection forming activity of any type is intrinsic to people. Collections have thus arisen at any time, differing only by their purpose. In the contribution types of collections of geological sciences are mentioned that have originated recently. In more detail are discussed collection funds of present day, the methods of acquiring them and their utilisation. Both the present and the past collection making cannot be judged in isolation from the other social phenomena. For that reason the mere description of collections and their possible development are not sufficient. An important role is still that of the historical approach to the study.

Key words: collections of geological sciences, various types, methods of acquiring, utilisation.

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In my contribution I do not want to deal with any actual collections, their description and history, but I will rather show at a general level the problems of their origin and their utilization.

The word geology appears in the literature for the first time a long time ago, in 1473, of course, at that time in quite a different sense than it is understood nowadays. From the point of view of its present meaning it appears for the first time in 1657, i.e. at the time when geology is constituted as a science. Its origin and development are closely linked up with economic and, above all, with technical changes occurring at that time. The practical geological activity itself is, of course, of much earlier date. As an example, let us mention mining, dating back deep to primeval times, or even earlier deposit of people in the Palaeolithic. From this very overview there follows a very long and, in its way, very varied history of geological sciences and their collections.

I cannot, however, omit a general statement saying that collection forming activity of any kind is intrinsic to any human population and that it is a property typical of all people. It concerns not only today's people and people in the historical past, but all members of the genus *Homo* since the beginning of its appearance. Collections of the most varied objects, and thus also those of geological sciences, have therefore always been made, differing, of course, by their purpose and the reason of their origin which were determined by the level of the then society. This, of course, also holds for the present.

In my contribution I want to mention only the recent time period. Also in this period collection funds have been formed for the most varied reasons which are sometimes

diametrically different. The individual types of collections can, of course, overlap at the same time. As the main types of the origin of collections I would mention the following:

1. Collections of exceptional objects. They are such objects as differ from the average by their size, extraordinariness, exceptionality, etc. These collections arose chiefly in the Middle Ages at castles (Schatzkammer) and their purpose was to amaze visitors. Mostly they were not sorted according to the kind of object.
2. Collections of beautiful objects. These collections link up with the first group to some extent. They are beautiful objects from the viewpoint of current peoples. This concerns above all minerals, to a smaller extent also fossils. The purpose of these collections is not instruction, but only their beauty. This type of collections is not time limited and it can be encountered mainly in private collectors and in small museums up to the present.
3. Collections documenting the cultural standard of a nation. Those collections are connected with the rise of national museums in the individual countries. In the first half of the 19th century classical multifunctional museums are constituted in all major European countries that collect specimens of most varied branches of sciences. They are professionally managed collector activities documenting not only the territory of the country in question, but many times also other geographically distant regions. The higher the quantity of the collections and, together with it, the professional processing, and the greater number of regions they document, the higher is the standard of those institutions. The standard of collection forming may differ greatly, many types passing into the further type. It is given by the technical and methodological standard of the respective branch of science in the particular country.
4. Collections of the contemporary period. They are not only mere collections from the individual localities or regions, but objects acquired by systematic investigation in the field whose task is not only obtaining those objects, but also taking down all information connected with the finds. Those collections can be very different as for their purpose, they may serve pedagogical purposes (such as collections of universities), they can, in an exhaustive manner, present the picture of the most important localities of regions, they can be systematically arranged, etc. Many times it is the case that the acquired objects are not classified according to the individual branches of science, but remain kept in their mutual relations, even though they are objects very distant from the viewpoint of the individual branches of science. As examples can be mentioned archaeological investigations in the field, which acquire not only archaeological material, but also geological, palaeobotanical, palaeozoological, pedological and other material and it is important to preserve it as a whole in its mutual relations and not to divide it into individual branches.

Objects thus acquired are not longer considered as a unit, but within complex mutual relations to other objects.

This kind of work follows from the fact that every object is the bearer of a number of encoded information items and the task of the specialist is to decipher maximum of such information. Under the earlier system of study only that information was sufficient whose bearer the object was. This was, naturally, in accord with the technique of material acquisition – a mere collection of material. The study of the object itself was sufficient for its determination and inclusion in the system, more was not required.

Today's studies naturally require more than a mere determination and they then start from processing not only the object proper, but also from the relations between it and its environment, in this case the rock surrounding it. It means that all the work connected with the acquisition of the object must respect the acquisition of the maximum amount of

information. As soon as the object is taken out of the rock and all the information encoded in its surroundings is not registered, we are never able to obtain it additionally. It means that all earlier collections or those not corresponding to this technique of research have only a limited value. Optimum situation from the viewpoint of obtaining information arises only when the detail character of camera investigation overlaps with the detail character of the investigation in the field.

All branches of human activity are always looking for new ways to their materialisation and are thus subject to constant changes. The same concerns also collections, their formation, preservation and utilisation. I do not see the formation of collections today as an isolated matter, but as a matter interconnected by many relations which other objects to whose influence it is naturally subjected.

All changes occurring from the point of view of collection forming are linked up with the changes going on in the society and with its economic, cultural and technological potential. If we want to understand the views of collection making, both past and present, we cannot judge them only as such, but in the sum of all social phenomena. Only in that way it is possible to understand all circumstances which, isolated and in fact separated from the then social process, would be hard to understand. For that reason the mere description of the collection funds and their development without the linkage with the other above factors is what I consider only the first part of the work which, although fundamental, needs for full clarification further studies mentioned above, in essence a comprehensive synthesizing view. To fulfil that task means to know in detail also the social phenomena of that time, not only locally, but also on the more global scale. Only thus it will not be a mere descriptive work, but studies that can result in general conclusions or, possibly, in understanding new regularities.

To make the society acquire and productively utilise collections of geological sciences, it must be acquainted with the above facts. The historical method of study, many a time neglected, plays even today a very important role. No new idea arises out of nothing, every type of thinking works with information acquired before which is constantly reshaped and transformed by operations of thinking. Their result is a new judgement or a new idea inspired by changes, which can be not only true, but also erroneous. The historical view with its ideas and analogies can then contribute to the correctness of the new opinion.

SOUHRN

Nezávisle na různých skupinách lidí můžeme v celé historii, lidstva nalézt vždy jejich aktivitu ve vytváření sbírek. Můžeme tvrdit, že jejich tvorba není proto vymezena nějakou dobou. Co je pouze odlišuje, je účel, pro který vznikaly. Tento příspěvek pojednává o jednotlivých druzích sbírek geologických věd. Detailně jsou diskutovány pouze sbírkové fondy dneška, metody jejich získávání a jejich využití. Dnešní a ani dřívější sbírkové fondy nemohou být přitom posuzovány v izolaci od společenských jevů. Z toho důvodu také jejich pouhý popis pro poznání jejich možného dalšího vývoje nedostačuje. Důležitou úlohu hraje vždy historický přístup v jejich studiu.

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