

## Invisible Colleges

The expression **invisible college** was coined to designate groups of researchers working in a similar area who maintain informal contacts with one another. They will also exchange information by means of written literature. Since it is possible to identify research networks in a given research area, invisible colleges will simply appear as part of these research networks.

### **1.Explanation**

Invisible college refers to a community of scientists. It is the name applied by some philosophers, sociologists and historians of science to loose-knit but intercommunicating scientific research groups operating within a paradigm. Invisible colleges are usually conceptualised as communicating groups forming an unofficial network with an upper limit of around one hundred members. Invisible colleges operate on an implicit circuit of institutions, summer schools, and research centres. They serve to confer prestige and facilitate communication by operating on an interpersonal level.

Invisible colleges serve to augment the development of a scientific discipline because personal contact contributes to the cumulative growth of knowledge. Those disciplines with little or no interpersonal relationships between

researchers, it is argued, are characterised by linear rather than exponential growth.

While invisible colleges act as a communication network within a discipline they also serve to connect one research area to another, with research area leaders drawing on other disciplines. Invisible colleges tend to have such leaders who are usually highly productive and have an important role in recruiting and influencing other members. They tend to be highly flexible and essential for the cross-fertilisation of ideas. Invisible colleges set norms of research orientation, of social interaction, of citation practice and of information utilisation. Invisible colleges, according to their proponents, are at the core of social structure of science, they act to constrain scientific work within a manageable framework whilst providing a forum for innovation and critique. Invisible colleges are dynamic and will nowadays have an important influence on the system of scientific publication. As van Raan (2005) stated, these groups of researchers will have the ability to encourage citations between members of the same invisible college. This fact has immediate consequences, since citation analysis is the main measure used to quantify the impact – and often the quality – of a publication. Invisible college refers to intercommunicating scientific researchers

who are working within a specified paradigm, or field of study that has some core issues in common.

## **2.History**

In the middle of the 17<sup>th</sup> century small groups of scholars and philosophers began to meet in various places in London to discuss the experimental method of scientific inquiry propounded by Francis Bacon. These groups which later became known as “invisible colleges” could not meet openly and regularly due to civil strife in England. In the meetings, they used to discuss about their research activities, results obtained, new areas that can be researched, and so on. The practice continues till today, of course, not in secret but in open meetings like national and international conferences where scholars belonging to the same discipline get acquainted with each other, come to know who is doing what, and discuss their areas of research, problems they are facing, latest findings, and so on. This acquaintance many a time turns into friendship and that continues when they exchange their reprints, correspond with one another through letters, talk over the phone, and so on. In this way, nowadays invisible colleges are formed. Hence, we can now define an invisible college as a loosely formed association of like-minded people who come together to share their experiences and knowledge.

The term invisible college is coined by Robert Boyle. After the civil war ended, these natural philosophers decided to establish a formal constitution which results in the foundation of one of the greatest scientific societies – The Royal Society on July 15, 1662 and the meeting of individual colleges in England eventually culminated in the establishment of the Royal Society.

### 3.Characteristic

- ❖ Membership in these invisible colleges is not formalized but is dependent on the acceptance of one's research effort by peers.
- ❖ The scientists see himself as belonging to amorphous groups of fellows scientist who share his research interest and attitude regardless of their organizational or geographical locations.
- ❖ The personal communication among eminent workers in a given field keeps the others informed of the developments in their field.
- ❖ This group falsely assumes that researches not included in their peer group or work done not in exactly their field will not be of interest.
- ❖ This group also assumes that the researcher should be able to duplicate any steps along the way to his own research goal.
- ❖ It also assumes that one knows what problem remains to be solved in one's specialty.

## References

- ❖ Black, M., 1962, *Models and Metaphors: Studies in language and philosophy*. Ithaca, Cornell University Press.
- ❖ Coser, L.A., 1954, 'Sects and sectarians', *Dissent*, 1, pp. 360–69.
- ❖ Crane D., 1969, 'Social structure in a group of scientists: a test of the 'invisible college' hypothesis', *American Sociological Review*, 34, pp. 335–52.
- ❖ Johnson 1964 REFERENCE LOST
- ❖ Krantz, D.L. (Ed.), 1969, *Schools of Psychology: A symposium*, New York: Appleton-Century-Crofts.
- ❖ Krantz, D.L., [1971], 1972, 'Schools and systems: the mutual operation of operant and non-operant psychology as a case study', cited by Krantz as: *Journal of the History of the Behavioural Sciences*, 7, July; actually published as Krantz, D. L., 1972, 'Schools and systems: the mutual isolation of operant and non-operant psychology as a case study,' *Journal of the History of the Behavioral Sciences*, 8(1), pp. 86–102.
- ❖ Price, D.J. de Solla, 1963, *Little Science, Big Science*, New York, Columbia University Press.

- ❖ Tieglund, R, 2003, 'Knowledge Networking: Structure and Performance in Networks of Practice' Dissertation for the degree of Doctor of Philosophy, Stockholm School of Economics, Stockholm
- ❖ Yinger, J.M., 1957, *Religion, Society and the Individual*, Collier-Macmillan.