Can they be extended to wider contexts than the cases arising in this problem—other graphs, groups; what is their ultimate power?

2. How far can one go toward embedding other classes of graphs or toward results about an arbitrary graph on n vertices? Can one obtain more detailed results such as statements about the existence of embeddings with given index?

3. How do the structures produced here—lists of cycles or flow graphs or whatever—relate to other combinatorial structures—block designs, Latin squares, etc?—is there any relation that allows nontrivial implication in either direction—from or to these results?

4. Is there anything at all in this work that is relevant to integrated circuit problems?

In a similar vein to the given problem are some more difficult questions. The results presented here relate to embeddings of embeddable graphs—when a graph is not embeddable one can raise an analogous question: How much crossing of edges is required to embed the graph? This problem seems more difficult than the original one, because one lacks a characterization of the nature of the "best" embedding; one cannot look for a solution as a triangulation. Very little is known about such "crossing number" problems except conjectured upper bounds on crossing number based upon obvious constructions. Their solution probably awaits a new set of ideas.

Thus, although this volume contains an extremely lucid presentation of a complete solution to the Heawood mapping problem, it should not necessarily be considered the last word on the general subject. Of course this is only one more reason why it deserves to be read.

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Differential analysis on complex manifolds, by R. O. Wells, Jr., Prentice-Hall, Englewood Cliffs, N.J., 1973, x+252 pp., $13.95.

Until the late 1940's it seems that compact complex manifolds were only studied occasionally and even then were not studied as a class of intrinsically interesting objects. In fact most examples of compact complex manifolds were either submanifolds of complex projective space P^n (such manifolds will be called *projective*) or else were Kähler manifolds (such as the nonalgebraic tori). It seems that Hopf's simple construction in 1948 of a non-Kählerian compact complex manifold with $\mathbf{C}^2-\{(0, 0)\}$ as universal covering made the study of complex manifolds much more interesting.