More Important Contributions in Economics:

1. The necessity of cardinal utility, including an impossibility theorem in the single or intra-profile framework of social choice:


   Shows that a reasonable social welfare or decision function is not possible if the intensities of individual preferences are not used, even if individual preferences are fixed; together with Parks (1976), it opens up a whole area of “single-profile” impossibility theorems.


2. A theory of third best:


   Shows the usefulness of simple optimality rules despite the theory of second best.

Non-economic activities, indirect externalities, and third-best policies, Kyklos, 1975, 507-525.


3. Separating efficiency and equality considerations in specific issues:

v Shows that it is more efficient to treat a dollar as a dollar (pure efficiency rules supreme) in specific issues, leaving the distributional objectives to the general tax/transfer system.

4. Combining micro, macro, and general-equilibrium analysis:

*Aggregate demand, business expectation, and economic recovery without aggravating inflation*, *Australian Economic Papers*, June 1977, 130-140.


v Combines the traditional micro, macro, and general-equilibrium analyses into a simplified integrated analysis allowing for non-perfect competition.


5. Diamond goods and burden-free taxes:


6. A third welfare theorem:


7. A case for higher public spending:

Relative-income effects and the appropriate level of public expenditure, Oxford Economic Papers, June 1987, 293-300.


v Provides a welfare economic foundation for public policy; argues in favour of maximizing the unweighted sum of individual welfares and in favour of increasing public spending.


8. Extending welfare economics, including pushing it from the level of preference to that of welfare, the significance of increasing returns, the paradox of universal externality, the E-F conflict, the value of life, and two-part tariffs:


* Equity and efficiency versus freedom and fairness: An inherent conflict, Kyklos, 1985, 495-516.

The older the more valuable: Divergence between utility and dollar values of life as one ages, Journal of Economics (Zeitschrift für Nationalökonomie), 1992, 55(1): 1-16.

Attempts to push welfare economic analysis to include environmental quality, relative-income effects, imperfect knowledge and imperfect rationality.


9. A new framework analysing the division of labour:


Using modern mathematical method to analyse the Classical economic problems of division of labour and evolution of economic organization at the economy level.


10. Environmental Economics (including climate change, global extinction, and sustainable development)


v At least desirable to tax disruption at the marginal cost of abatement which is easier to estimate than the marginal damage of disruption.


Argues that the problem of climate change is not so much trading off consumption now with the future but that of reducing the probability of catastrophes and that this strengthens the need for immediate and strong actions.


file:///C:/Users/ykng/Downloads/Ng-2016-Global_Policy.pdf


Beyond Economics:

11. Providing a strong moral philosophical support for utilitarianism:

v Shows that, with compelling axioms and the recognition of finite discriminatory power, what the society should maximize should be the unweighted sum of individual utilities/welfares.


12. Proposing welfare biology:


v Combines economic analysis and the principles of natural selection to provide insights on some tricky questions of animal welfare such as: Which species are capable of welfare? Whether their welfare levels are positive or negative? How could welfare be increased?

13. Solving the moral philosophical dilemma of optimal population:


14. Happiness studies, including proposing a way to measure happiness more cardinally and interpersonally more comparably, and a new national success indicator:


15. Contributing towards the solution of the mystery of the origin of the universe and part solution to the problem of the lack of time on Earth for evolution:


* How Did the Universe Come About? Axiomatic Evolutionary Creationism*, Fudan University Press, August 2011. 《宇宙是怎样来的？》