

APPENDIX II

List of Condensed NP's in The Kolhapur Corpus with their Elaboration

I NP's Beginning with Adjective: 3 Premodifiers

i) Adj+Adj+Adj+N(Head):

1. an amorphous eosinophilic interstitial material (= the material which is present in interstitius and is eosinophilic and amorphous)
2. chronic non-specific inflammatory changes (= changes which are inflammatory, chronic and non-specific)
3. any feasible partial solution (= any solution which is attainable and which is not minimum)
4. a new feasible partial solution (= a new solution which is attainable and which is not minimum)
5. certain partial differential equations (= certain differential equations which study partial effects)
6. non-linear partial differential equations (= differential equations which study partial effects and which are not linear)
7. cheap non-bauxitic raw materials (= materials containing no bauxite and which are cheap)
8. high magnesian ultramafic sequence (= a sequence [of rocks] constituted of very dark rocks [ultramafic] which is high in magnesian)
9. major cellular fatty acids (= major acids which are fatty and extracted from cells)

ii) Adj+Adj+N+N(Head):

1. the nuclear kinetic energy operator (= the operator (mathematical function) that corelates to nuclii with respect to their kinetic energy)
2. vast inland aquaculture resources (= the resources of vast inland aquaculture potential)
3. this universal oral hydration solution (= this solution which is taken orally and used for replacement of loss of water from a body and which is available/accepted universally)
4. additional free water intake (= intake of additional water in a free form)
5. any definite cell structure (= any structure of a cell which is definite)
6. all intracranial space-occupying lesions (= the space-occupying lesions which are present intracranially)
7. all chronic brain abcesses (= all abcesses of brain which are chronic)
8. transient viscous fluid flow (= a flow of viscous fluid which depends on time)
9. the implicit finite difference analogs (= the analogs of differential equation by a system of simultaneous equation of finite differences)

10. some subtle flow properties (= some properties of flow which are not so obvious)
11. the critical viscous sub-layer theory (= the theory of sub-layer whose viscosity is critical)
12. valuable anhydrous aluminium chloride (= valuable chloride of aluminium which is anhydrous)
13. the various common air pollutants (= the air pollutants which are common and various)
14. small dark brown spots (= small spots which are dark in colour brown)
15. the high metamorphic facies rocks (= the rocks of a group [facies] among metamorphic which are formed under high pressure)
16. cellular fatty acid profile (= the profile of fatty acid extracted from cells)
17. the initial fatty acid profile (= the profile of fatty acid which is at the initial end)
18. energetic neutral hydrogen atoms (= the neutral hydrogen atoms which are energetic)
19. several other fusion experiments (= several other experiments involving fusion)

iii) Adj+Adj+EN participle+N(Head):

1. a recent double-blind randomized trial (= a trial which is randomized, double-blind and recent)

iv) Adj+Adv+Adj+N(Head):

1. a suitable indigenously available substitute (= the substitute which is suitable and available but never to be digested)
2. cheap readily available fuels (= fuels which are readily available and cheap)

v) Adj+Adv+N+N(Head):

1. a dense enough high-temperature plasma (= a plasma of very high-temperature which is sufficiently dense)

vi) Adj+N+N+N(Head):

1. lateral root growth intensity (= the intensity of growth of lateral root)
2. a high calcium carbonate content (= the material that contains a high percentage of carbonate of calcium)
3. an oral glucose electrolyte solution (= a solution which is taken orally and which contains glucose and electrolyte)
4. thin needle aspiration biopsy (= a biopsy that is done by aspiration with a thin needle)
5. prasthetic heart valve transplant (= transplantation of prasthetic heart valve)
6. less computer memory storage (= the storage of computer memory which is less)
7. the finite difference matrix equations (= the equations in matrix form with/in finite differences)
8. a solid iron silicon phase (= a solid phase of iron and silicon)

9. other basemetal sulphide deposits (= other deposits of basemetal [of copper-lead-zinc] sulphide)

vii) Adj+N+Adj+N(Head):

1. high sodium oral solution (= the solution which is taken orally and which contains increased amount of sodium)
2. the voluminous by-product red mud (= red mud which is the voluminous by-product of (in extraction of) aluminium)
3. other odd-chain fatty acids (= other fatty acids containing odd number of carbon atoms in a chain)

viii) Adj+N+ING participle+N(Head):

1. any salt loading test (= any test which requires administration of excess amount of salt)

ix) Adj+ING participle+N+N(Head):

1. free standing pile groups (= the groups of pile which are standing freely)

x) Adj+EN participle+Adj+N(Head):

1. the super saturated solid solutions (= the solid solution lacking creation of nucleation centres which holds higher amount of solutes than the saturation limit at the temperature given)
2. tertiary saturated aliphatic acid (= acid which is aliphatic and saturated at tertiary level)
3. other needed physical parameters (= other parameters of natural science which are needed)

xi) Adj+Num+N+N(Head):

1. any two foot screws (= any two screws which are at the foot [of telescope])
2. insignificant second order effect (= second order effects which are insignificant)

II NP's Beginning with Adverb: 3 Premodifiers

i) Adv+Adv+Adj+N(Head):

1. a much more favourable site (= a site which is much more favourable)

ii) Adv+Adj+Adj+N(Head):

1. an exceptionally complex emotional structure (= an emotional structure which is exceptionally complex)
2. a rather uncommon malignant tumour (= a tumour which is malignant and rather uncommon)
3. the most predominant fatty acid (= the fatty acid which is most predominant)

4. a very powerful pearlite promotor (= a promotor of pearlite which is very powerful)
5. a much stronger toroidal field (= a toroidal field which is much stronger)

iii) Adv+Adj+N+N(Head):

1. extremely high mutation rates (= the mutation rates which are extremely high)
2. the relatively high germination percentages (= the percentages of germination which are relatively high)
3. very poor root system (= a root system which is very poor)
4. very small time steps (= steps [length] of time which are very small)
5. the most positive voltage level (= the level of voltage which is the most positive)

iv) Adv+N+Adj+N(Head):

1. a more accurate preoperative diagnosis (= a diagnosis which is made accurately and preoperatively)
2. highly time dependent flow (= a flow which is highly dependent on time)

v) Adv+ING participle+Adj+N(Head):

1. the naturally occurring fibrinolytic activity (= the fibrinolytic activity which occurs naturally [in a body])
2. upwind differencing explicit methods (= the finite difference methods against the direction of wind yielding explicit solutions)

vi) Adv+EN participle+Adj+N(Head):

1. a well documented morphotectonic analysis (= an analysis of morphotectonic features which is well documented)
2. well defined molecular alterations (= molecular alterations which are well defined)
3. more sophisticated experimental methods (= experimental methods which are more sophisticated)
4. the well characterized toxic diseases (= diseases which are toxic and well characterized)

vii) Adv+EN participle+N+N(Head):

1. the recently discovered nickel-sulphide deposits (= deposits of nickel-sulphide [minerals] which have been discovered recently)

III NP's Beginning with Noun: 3 Premodifiers

i) N+N+N+N(Head):

1. seed coat colour variation (= variation in colours of coats of seeds)

2. seed coat colour categories (= categories in colours of coats of seeds)
3. the sea floor sediment samples (= the samples of matter which is deposited on the floor of the sea)
4. water column phosphate analysis (= analysis of phosphate in the column of water)
5. shock Boundary layer problems (= problems which are at the boundary layer and related to the shock)
6. the sodium gallate-sodium aluminate solution (= solution of gallate of sodium and aluminate of sodium)
7. alkali metal chloride solutions (= solutions of chloride of alkali metal)
8. minus 80 mesh drainage samples (= samples which are drained through minus 80 mesh)

ii) N+N+Adj+N(Head):

1. village level small industries (= industries whose capacity of production is small and which are located in a village)

iii) N+N+ING participle+N(Head):

1. future resource sensing systems (= sensing systems of future resource)

iv) N+N+EN participle+N(Head):

1. nutrient broth grown cells (= cells which are grown in nutritious broth)

v) N+Adj+Adj+N(Head):

1. protein rich organic feed (= a feed which is rich in organic protein)

vi) N+Adj+N+N(Head):

1. the mean faecal sodium concentration (= the mean concentration of sodium in stool/faeces)
2. a two-point forward difference formula (= a difference formula based on two points in a forward direction)
3. a two-point backward difference formula (= a formula which computes the backward difference by two points)

vii) N+ING participle+N+N(Head):

1. decision making logic elements (= elements of logic in making a decision)

viii) N+EN participle+N+N(Head):

1. battery operated systronics meter (= a meter which is manufactured by the systronics and operated by a battery)
2. mass analysed ion beam (= an ion beam which was analysed in terms of its mass)

IV NP's Beginning with Number: 3 Premodifiers

i) Num+Adj+Adj+N(Head):

1. three successive planar surfaces (= three surfaces which are plane and in succession)
2. three different spectral bands (= three different bands of [colour/wave length] produced by the spectrum)

ii) Num+Adj+N+N(Head):

1. two unequal daughter cells (= two daughter cells which are not equal)
2. two experimental LANDSAT spacecraft (= two LANDSAT spacecraft which are used for experimental purposes)
3. three basic logic circuits (= three circuits which are built on [basic/elementary] logic circuits)

iii) Num+Adv+Adj+N(Head):

1. two approximately linear portions (= two portions which are approximately linear)
2. two more powerful injectors (= two injectors which are more powerful)

iv) Num+N+N+N(Head):

1. the two bread wheat varieties (= the two varieties of bread wheat)
2. two lymph node biopsies (= biopsies of two lymph nodes)
3. two video tape recorders: self explanatory

v) Num+ING participle+Adj+N(Head):

1. two existing experimental works (= two experimental works on which observations exist)

vi) Num+EN participle+N+N(Head):

1. the first excited singlet state (= the state which is singlet and which excited at the first higher level with respect to the ground step)

V NP's Beginning with Specifier: 3 Premodifiers.

i) Specif+Adj+N+N(Head):

1. the Roberts venous flow stimulator (= the stimulator [an instrument] which was invented by Roberts and which stimulates flow of venous blood).
2. the flowtron intermittent compression system (= the system of compressing intermittently contained in flowtron [an instrument manufactured by Flowtron]).

ii) Specif+N+N+N(Head):

1. x-ray line profile analysis (= an analysis of profile of x-ray line)

VI NP's Beginning with ING participle: 3 Premodifiers.

i) ING participle+Adj+N+N(Head):

1. the following initial boundary conditions (= the following conditions which are at the beginning and at the end)

VII NP's Beginning with EN participle: 3 Premodifiers

i) EN participle+EN participle+ING participle+N(Head)

1. the so-called improved living standard (= the standard of living which is so-called improved)

ii) EN participle+Adj+Adj+N(Head):

1. a perturbed non-linear functional iteration (= a functional iteration which is not a linear and perturbed one)

iii) EN participle+Adj+EN participle+N(Head):

1. off-coloured (dirty brown-coloured) seeds (= seeds which have off-colour [i.e. dirty brown colour]).

iv) EN participle+N+N+N(Head):

1. the transformed Boundary Layer equations (= Boundary Layer equations which have been transferred to the simpler form)

I NP's Beginning with Adjective: 4 Premodifiers

i) Adj+Adj+Adj+Adj+N(Head):

1. only chronic non-specific inflammatory changes (= changes which are only inflammatory, non-specific and chronic)

ii) Adj+Adj+Adj+N+N(Head):

1. any central nervous system signs (= any signs related to central nervous system)

iii) Adj+Adj+N+N+N(Head):

1. systematic fresh water carp culture (= carp culture in fresh water which is carried out systematically)
2. certain time-dependent fluid flow problems (= certain problems of fluid flow which are time-dependent)
3. various important resource data objectives (= various objectives of resource data which are important)

iv) Adj+Adj+EN participle+N+N(Head):

1. any arbitrary assumed level surface (= any level surface which is arbitrarily assumed)

v) Adj+N+N+N+N(Head):

1. the Central Inland Fisheries Research Institute (= the Central Institute in which the researches are done on inland fish)
2. the compressible Boundary Layer interaction phenomenon (= the phenomenon of interaction which is at the Boundary Layer for the compressible flow)

vi) Adj+N+Adj+N+N(Head):

1. high sodium oral hydration solutions (= solutions which are taken orally to replace loss of water from the body which contains increased amount of sodium)
2. the high grade migmatic gneiss-granulite terrain (= the terrain consisting of migmatic gneiss and magmatic granulite which have been found due to changes brought by high temperature and pressure [in geological past])

vii) Adj+Adv+Adj+ING participle+N(Head):

1. several enzymatically soluble active proteins (= several proteins which are soluble by enzymatic means)

II NP's Beginnig with Adverb: 4 Premodifiers

i) Adv+Adv+Adj+ING participle+N(Head):

1. relatively highly conscious calculating operation (= an operation which requires relatively highly conscious calculations)

ii) Adv+Adj+Adj+N+N(Head):

1. a very important bimolecular deactivation process (= a process involving two molecules which leads to deactivation and which is very important)
2. significantly higher overall mutation rate (= the overall mutation rate which is significantly high)
3. a very small inter eletrode distance (= an inter electrode distance which is small)

III NP's Beginning with Noun: 4 Premodifiers

i) N+N+Adj+Specif+N(Head):

1. a 5-litre capacity New Brunswick fermentor (= a new fermentor manufactured by Brunswick and which has a capacity of 5-litre solution)

ii) N+Adj+Adj+N+N(Head):

1. phosphate rich deeper water masses (= the masses containing phosphate found in water at the very deep level)

iii) N+Adj+N+N+N(Head):

1. a two-point forward time difference formula (= the formula which computes the forward time difference by two points)

IV NP's Beginning with Number: 4 Premodifiers

i) Num+Adj+N+N+N(Head):

1. three dimensional heat conduction equation (= an equation of conduction of heat in a three dimensional object)
2. one dimensional gas dynamics equation (= an equation of dynamics of gas restricted to one dimension)

ii) Num+Adv+EN participle+N+N(Head):

1. first fully expanded leaf blade (= a first leaf blade which is fully expanded)

iii) Num+N+N+N+N(Head):

1. three Return Beam Vidicon Cameras (= three Vidicon cameras which require return beam)
2. two Data collection system receivers (= two system receivers which collect data)

V NP's Beginning with Specifier: 4 Premodifiers

i) Specif+N+N+N+N(Head):

1. a 'cameco' (Sweden) pistol grip syringe holder (= a syringe holder which is manufactured by 'cameco' [Sweden] having a pistol grip)

I NP's Beginning with Adjective: 5 Premodifiers

i) Adj+N+Adj+N+Adj+N(Head):

1. a high magnesian komatitic type volcanic suite (= a suite of volcanic [rock] of komatitic type containing high magnesian)

ii) Adj+Adv+Adj+N+N+N(Head):

1. cheap yet efficient pollution abatement techniques (= techniques of abatement of pollution which may be cheap but efficient)

iii) Adj+Adv+EN participle+Adj+N+N(Head):

1. a deep medially placed frontal lobe abscess (= an abscess in the frontal lobe which is placed deep and medially)

iv) Adj+N+EN participle+Adj+N+N(Head):

1. heavy ion induced inner shell ionisation (= an inner shell ionisation which is induced by heavy ion)

II NP's Beginning with Noun: 5 Premodifiers

i) N+N+Adj+N+Adj+N(Head):

1. migmatite gneiss high grade metamorphic terrain (= the terrain consisting of gneiss showing the character of migmatite [banded] which has been found due to changes brought about by high temperature and pressure [in geological past])

III NP's Beginning with Present Participle: 5 Premodifiers

i) ING participle+Num+Adj+N+N+N(Head):

1. the corresponding two dimensional shock interaction problems (= the interaction problems which are related to the shock and to each other in two dimensions space)

I NP's Beginning with Adjective: 6 Premodifiers

i) Adj+Adj+EN participle+N+N+N+N(Head):

1. several other disturbed Boundary Layer Flow problems (= several other problems of flow which are disturbed at the Boundary Layer)

II NP's Beginning with Noun: 6 Premodifiers

i) N+N+EN participle+N+N+N+N(Head):

1. silicon oxy-nitride bonded silicon carbide side walls (= the side walls of cathode which are created with silicon oxy-nitride bonded silicon carbide)

III NP's Beginning with Number: 6 Premodifiers

i) Num+Adj+N+N+N+N+N(Head):

1. three Dimensional shock Boundary Layer Interaction problems (= the Interaction problems which are at the Boundary Layer and related to shock and are in three dimensions)

2. three Dimensional shock boundary layer interaction phenomenon
(= the interaction phenomenon which occurs at the boundary layer and is related to shock in three dimensions)

IV NP's Beginning with Past Participle: 6 Premodifiers

- i) EN participle+Adj+Adj+N+ING participle+N+N(Head):
 1. a single-celled facultative phototropic, non-nitrogen fixing blue-green alga (= an alga of blue-green colour which is single celled facultative phototropic and which lacks ability of fixing nitrogen)