<u>On determining a county champion in years when there is no Worcestershire congress</u>

§1.   When this subject was discussed at the Executive Committee meeting on 19.viii.2016 there seemed to be general agreement that it is desirable to have a county chess champion every year, and that in years when there is no congress the title should be awarded on the basis of performance in the Worcestershire leagues and for Worcestershire county teams.   But we came nowhere near consensus on any of the following questions: (i) Should only first-division and first-team results qualify, or should those of second (and lower) divisions and teams do so as well?   (ii) If the latter, should second-division and -team results count on a par with those in first divisions and teams or should they be reduced by a suitable factor to reflect the weaker opposition there?   (iii) If the latter, what would be a suitable factor?   (iv) Should results from the Birmingham League (and if so perhaps other external leagues) count at all toward the Worcestershire championship?   (v) If so, should they count on a par with corresponding divisions in our leagues, or be reduced by a suitable factor to ensure that external leagues are not the main determinant; and how should results in third and lower divisions be treated?   (vi) Should the title of county champion and the trophy which it was reported that Teresa Friar and her family propose to donate in Jim's memory for the encouragement of chessplaying in Worcestershire go together?

§2.   The discussion on 19.viii.2016 consisted to a large extent of people talking past each other from up to half a dozen different unstated premises.   It was skewed by starting from the report of the proposed Friar trophy, which was proposed to be awarded on the basis of total points scored, with no reducing factors for lower teams or divisions.

§2.1.   §16(c) of the recently accepted minutes of that meeting refers to "a draft proposal" for the Friar trophy.   That overstates the case; there was only an oral report, not defining exactly what events would count toward it: presumably nothing internal to clubs, and presumably all publicly open graded competitions, presumably also the Wheatley Trophy; would other publicly open ungraded and/or semi-formal competitions qualify, or would that be left to the discretion of the organizers from year to year? and who would those organizers be?

§2.2.   Someone (I think John Wrench) stated at the Executive Committee meeting on 21.iv.2017 that the meeting on 19.viii.2016 agreed on the method of aggregating raw points for awarding the Friar trophy.   No such agreement is minuted and none was reached according to my recollection.   If the Friar family and those colleagues closest to them have come since to a definite agreement on the matter, I doubt if any of the rest of us would wish to quarrel with them; but if they have, those colleagues should report it formally to the A.G.M. so that its exact terms can be recorded.

§3.   My premiss is that in years when there is not a congress, the person declared county champion should be the one who would have won a closed Worcestershire championship tournament had one been held and the entrants all performed at exactly the level they did in our leagues and county teams during that year.   The number of potential candidates is such as to ensure that the hypothetical tournament would be, as actual championships have invariably been during the last four decades at least, a Swiss tournament, in which the winner is not merely the player who scores most but the one who does so against the strongest opposition. Our procedures for choosing a champion should mimic as closely as we deem practical the effects of a Swiss tournament with closed Worcestershire entry.

§4.   There will be a trade-off between perfection and simplicity, much as with the Wheatley trophy.   Whatever decisions we make will create biases of various kinds in favour of particular classes of players.   We may reasonably expect to keep them small but we should be

aware of their likely direction.

§5.   I do not know if the Worcs. championship has ever been won by a player whose competitive chess was confined to second-division and second-team matches; I rather doubt it. But with tournaments open to all Worcestershire players it was definitely in principle possible. The answer to question (i) is therefore unambiguously that results at those lower levels ought to count toward the championship.

§6.   Just as unambiguously, the answer to question (ii) is that they ought not to be on a par with results from the first team and first division.   This is especially so since in most years in the County League and some years in the District League division 2 has more matches than division 1.   If results turn out fairly randomly (or "normally" in a statistical sense) the winner on raw league points would more often than not be a division 2 player.   Few if any of the strongish players in division 1 would think that right.

§7.   So the answer to question (vi) is that if the award of the Friar trophy is based on raw points, it has to be kept completely separate from the county championship.   There are also other reasons for this; cf. §28.

§8.   The procedures we adopt in determining a county champion should be such that all those of us who might have a decent chance of winning the championship ourselves in a good year should be happy to believe that the person who is declared to have won it has performed better than we have in that particular year.

§9.   If I scored 6 points in division 1 of the County League I should definitely think that a player who had scored 8 points on the corresponding board in division 2 had not achieved as much as I had.   If he scored 9 or 10 points I should have doubts; if he scored 11 or 12 I might well be persuaded that he had done better than me.

§10.   These instinctive reactions suggest that the reduction factor for the second division should be in the range ½ to ⅔; that is, sticking to simple ratios, either ½ or ⅗ or ⅔.

§11.   §§9-10 assume, as the discussion in August did, a single value for results in a given division; but that is not right.   The difference in strength of opposition between boards is substantial.   The simple figures in §10 should be merely the pivot of a system which would take that into account.   There are several ways we might do this; and one serious further variable affecting them, not raised in the August meeting, is whether we think all boards in division 1 of the County League stronger than any boards in division 2 or whether we think there is some overlap.

§12.   If we think there is overlap, it is logical to take as base ratio the one most favourable to division 2 players.   Then a simple model is 1 for board 1 of division 1, $\frac{11}{12}$ for board 2, ⅚ for board 3, ¾ for board 4, ⅔   for board 5 of division 1 and board 1 of division 2, $\frac{7}{12}$ for board 6 of division 1 and board 2 of division 2, ½ for board 3 of division 2, $\frac{5}{12}$ for board 4 of division 2.

§13.   I take it as axiomatic, for the sake of transparency and to minimize mistakes by whoever does the arithmetic in the first instance (if we adopt the kind of system I am describing I would volunteer to be that person) that the coefficients for each board in each division should be the same in the District League as in the County League.

§14.   There cannot in the nature of things be complete congruence between the patterns of a league with 4 boards in the first division and one with 6.   The only non-congruent feature in the model in §12 is that the District League does not have overlap between divisions.   That model has the advantage of a smooth cline between boards in both divisions of both leagues, which is impossible without overlap between County League divisions.

§15.   If there is no overlap, the simplest model is the one least favourable to division 2 players.   Then the coefficients for division 1 players would be in descending board order 1, $\frac{11}{12}$, $\frac{5}{6}$, $\frac{3}{4}$, $\frac{2}{3}$, and $\frac{7}{12}$, for division 2 players $\frac{1}{2}$, $\frac{5}{12}$, $\frac{1}{3}$, and $\frac{1}{4}$.   A drawback is the big jump between bottom board of division 1 and top board of division 2 in the District League.

§16.   Base ratios of $\frac{2}{3}$ or $\frac{3}{5}$ are an easy fit for the District League. $\frac{2}{3}$ would work just as in §12. With $\frac{3}{5}$ the coefficients for division 1 players would be $\frac{9}{10}$ for board 2, $\frac{4}{5}$ for board 3, $\frac{7}{10}$ for board 4, for division 2 $\frac{3}{5}$ for board 1, $\frac{1}{2}$ for board 2, $\frac{2}{5}$ for board 3, and $\frac{3}{10}$ for board 4. The trouble with either of these is that they would require for division 1 of the County League either much more complicated fractions or aggregation of some of the boards together.   The former creates a complete lack of congruence between all boards other than board 1 in Division 1 of the two leagues.   The latter privileges some boards arbitrarily against others in division 1 of the County League; there are ten possible versions of it but only one would preserve congruence between the two leagues, namely to lump boards 4, 5, and 6 together.

§17.   If we are to have tidiness in one league and not the other, the tidy one should in principle be the County League, both because that is the league directly controlled by this Association and because (to mention briefly another contentious matter) its competitions consist still at present of   pure chess unadulterated by blitz chess.   I therefore recommend, as the answer to question (iii), that we choose between the models in §§12 and 15.

§18.   It should be noted that applying coefficients to the boards alters the biases of the system.   If my instincts in §9 were right, bias with the base ratio of $\frac{2}{3}$ should be in favour of division 2 players, the base ratio of $\frac{1}{2}$ should favour division 1.   The coefficients lowering the base ratio *diminish* the initial bias in §12 and *increase* it in §15.   Unless my whole approach is still skewed by the raw-point-counting tendency of our August discussion into treating the relative strengths of the two divisions as closer than they really are, §12 should be the fairer of the two.

§19.   It is obviously desirable that these intuitive figures should be supported or corrected by detailed analysis of the strengths, as measured by ECF gradings, of the different boards of the two divisions in practice over one or more seasons.   If colleagues decide at the A.G.M. to adopt the kind of system I propose, or more cautiously that it is worth detailed working up with a view to adopting it, I will undertake to produce such an analysis for the August Executive Committee meeting.   In the absence of at least provisional approval, I have not felt like devoting the time to it.

§20.   Real-life figures will anyway be untidy.   Gaps between one board and the next will not be the same for all boards, and they will vary from year to year.   The system we adopt should be in touch with reality, but any system will inevitably be a schematization neater than reality.

§21.   I strongly recommend that gradings as such play no part in whatever system we adopt. They do not in tournaments except as a framework for early pairings.   Nor are they a reliable guide to results.   When Ray Collett won our championship in 1984-5 his fellow-competitor Simon Small had a grading about 40 points higher.

§22.   And whoever does the arithmetic in the first instance, it should be possible for interested parties to check it from the information available to all of us on Ray's website, without requiring the arcane knowledge of a grading officer, and without requiring that already triply burdened individual to do a stroke of extra work.

§23.   The principled answer to question (iv) is No.   As scores in other events count nothing at all toward the result of a closed tournament, neither should scores in leagues outside Worcestershire count toward our league-based analogue of it.

§24.   Two of the people notably talking past each other at the August meeting were Laurence Wheatley and myself.   I made the point in §23, supposing his argument to be for Birmingham League scores to count in addition to scores in our two leagues.   But if I understood him better in conversation afterwards than during the meeting, it was really that people whose circumstances only allow them to play in one of our two leagues should be allowed to count scores in the Birmingham League instead of the other.   Colleagues may possibly have more sympathy with this than I do.

§25.   *If* B'ham League results are allowed to be used in this way, it would need to be with a reduction factor of ½ even for division 1.   It is absolutely wrong that a 100% score over 12 games in the B'ham League should count more than, or even as much as, a 100% score over 8 games in division 1 of the County League towards the Worcestershire championship.   Lower divisions would need further reduction again.

§26.   If the grading cline between divisions is the same as in our leagues, and if we adopt the base ratio ⅔ as suggested in §12, the figures can be simplified slightly in favour of lower divisions by smoothing $(⅔)^2$ from $\frac{4}{9}$ to ½.   The ratios between division 1 and the lower divisions will then be 1, ⅔, ½, ⅓, ¼, ⅙, all multiplied by the reduction factor of ½ in §25.   So the answer to question (v) is, from division 1 down, ½, ⅓, ¼, ⅙, ⅛, $\frac{1}{12}$.

§27.   Not only is there a principled objection to letting Birmingham League results count, there is the very strong practical objection that it negates the considerations of §22.   How is a random Worcestershire player going to be able to check calculations based on them?   How is the poor arithmetician working from Ray's website going to get hold of them in the first place? It would all be more trouble than it would be worth.

§28.   As far as I know there have been no particular arguments for use of results from external leagues other than the Birmingham League.   I hope there will continue to be none. This is another area where procedures for the county championship should be kept severely apart from those adumbrated for the Friar trophy.

§29.   County games are simpler to deal with.   There are not many of them, and for most first-team players most of the time the strength of opposition is such as might be met on the top two boards of the County League or stronger than that.   So I would suggest, in the spirit of encouraging ambitious players actually to turn out for county matches, that all points scored by all boards in first-team county matches should keep their full value toward the championship.

§30.   The disparity in strength between the county first team and the others is greater than between the two divisions of our leagues, at the top end much greater.   According to the rationale of the English grading system (which does not allow for the flattening of probability-curves near their extremes) Pavel Besedin would be expected to score 110% against an under-140 board 1; even I, who am down to be board 6 against Suffolk on Saturday, would be expected to score 90%; and our first team is usually outgraded by its opponents.   So the least harsh reduction coefficients that can possibly be considered realistic are ½ for the under-140s and ⅓ for the under-120s.

§31.   Colleagues may possibly feel that in view of the recent national success of the under-140 team it would be churlish to be so narrowly earthbound.   In that case we might treat the lower county teams in line with league divisions and use ratios of ⅔ for the under-140s and ½ for the under-120s, again the same for all boards.

§32.   To sum up, I propose that in years when there is no Worcestershire congress the county champion should be the player with the highest aggregate score in County League and District League matches treated as in either §12 or §15, with a preference for §12, and county

matches treated as in §29 and either §30 or §31.

§33.   I have long thought it dishonourable for a county chess association not to have a champion every year.   If we agree on a version of this system, I would propose extending it retrospectively to those vacant years for which adequate records are accessible.   I would again undertake to be the arithmetician in the first instance (though I would not guarantee to do it quickly).

Peter Kitson 11.v.2017