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Big Love: Managing a Team of Research Supervisors

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The last decade or so has seen policy moves towards less relentlessly dyadic supervisory practices, with 'team' supervision becoming part of the higher education institutional agenda in Australia and elsewhere. Team supervision, used here to refer to two or more supervisors sharing responsibility for a PhD candidate's progress, has sometimes been welcomed as the answer to the varied problems that have dogged research supervision (Cullen 1994; Pole 1998). Institutional motivation for team supervision has been mostly pragmatic: to enable novice supervisors to learn from more experienced supervisors, and to provide the student with a 'multi-faceted support network' across the course of candidature (see for example, in the UK, the Quality Assurance Agency for Higher Education 1999). Team supervision is also a response to the increasing specialisation of knowledge, cross-disciplinary projects, and professional doctorates, which require a diversity of expertise (Malfroy 2005; Manathunga, Lant & Mellick 2006; Watts 2010; Peelo n.d.).

Understanding of how team supervision works, and what its consequences are for the field of doctoral education, lags behind coalface practice. Although team supervision is widely advocated at the institutional level, the small pool of existing research on the topic is more tentative in its support. Kinzie et al. (2007) observe that a diversity of perspectives within a research team brings complex questions to the research process, challenges as well as opportunities, and research outcomes characterised by tradeoffs. Others observe that different models of joint supervision exist within the social sciences and the natural sciences, with teams generally

being more common and larger in the latter than in the former, cautioning against prescriptive regulations across the board (Pole 1998).

The means by which students negotiate research outcomes within a team of several supervisors has not been explored in the literature in any detail. This is probably not only because of the relative newness of the team model, but also because existing supervision research focuses on the supervisor's role as manager of the research project rather than the student's role (see, for example, Lee 2008a). Existing scholarly literature on supervision emphasises the supervisor's style, skill, responsibility and management as key to successful research outcomes, with little comment as to what the student brings to the relationship (see, for example, Delamont, Parry & Atkinson 1998; Styles & Radloff 2001; Grant 2003; Danby 2005; Gatfield 2005; Anderson, Day & McLaughlin 2006; Emilsson & Johnsson 2007; Lee 2007; Lee 2008b; Amundsen & McAlpine 2009; McCormack 2009). Perhaps this reflects traditional supervision constructs populated by some prevalent and enduring metaphors, most prominently journeying, apprenticeship/discipleship and familial conceptions of parent/child (Lee & Green 2009). These metaphors not only focus on student—supervisor pairs, but also place little to no emphasis on the capabilities the student brings to the research project, preferring to depict the student as a neonate, embarking on the difficult process of acquiring complex knowledge, a process orchestrated by the knowing supervisor.

Equally, it remains unclear whether unrecognised legacy discourses of dyadic supervisory practice inhibit, or even perhaps undermine, moves towards implementing more collaborative supervision models and practices. With respect to this Pole (1998: 265) notes that a senior supervisor usually takes overall responsibility for the student, though not a lead role in supervision, and that it is rare for supervisors to meet together, with the emphasis 'placed much more on the individual student seeking out members of the supervisory team when necessary'. Pole (1998: 265) notes further that 'the supervisory team was not a relationship of equals and this may be reflected in the differing status of those involved and in their involvement with the student'.

We aim, in this chapter, to explore student experiences of team supervision, providing an analysis of eight semi-structured interviews with research students working in team supervision settings. Students were recruited by direct invitation and took part in one-on-one interviews (in one case, two students from the same discipline were interviewed together).

Interviews were transcribed and summaries focusing on their experience of and approach to team supervision are presented below. Interviews took between 30 and 60 minutes and the project had been approved in advance by the Human Research Ethics Committee of the university in which the study was undertaken. All names and distinguishing information have been changed or removed in order to ensure anonymity of participants. The students were known to two of the researchers from their previous participation in academic development workshops run by the researchers. None of the researchers are on the interviewed students' supervisory panels. There is a clear bias within the sample towards students who are proactively involved in research student development workshops and local research communities, and who take responsibility for 'managing' supervision, than is likely to be typical of research students in the general cohort.

The chapter is divided into two parts. The first provides a description of each team supervisory case, highlighting the active role of each of the students within the team supervision process. The second part explores the extent to which the dominant supervisor model has been superseded by a more equal distribution of engagement with the student. The second part also outlines the key elements of supervision management including those related to relationships, conflict, feedback and communication. In continuity with the familial metaphors often used to describe supervision, we liken team supervision to the polygamous arrangements in the drama 'Big Love' (2006-10) in which the husband, much like our students, must skilfully and sensitively manage multiple relationships with very different partners.

Case studies

Peta

Peta's flat-structured supervision team comprises three members from different disciplines, one of whom is significantly less experienced as a supervisor than the others, but whose contribution Peta greatly values. Peta explains that each supervisor brings different strengths to the team: '*It depends on what I need at the time, so they all serve different functions*'. Despite the advantages of the team composition, Peta says she sometimes finds herself in the frustrating and awkward position of managing inconsistent advice from the three supervisors. She explains how, having spent a great deal of

time responding to feedback from one supervisor on one draft chapter, she then received feedback on the changes from the other supervisors, who indicated that the redraft was inappropriate. Peta comments: '*I didn't know where to go from there, and it was also quite defeating*'. In response she has initiated a strategy to deal with the situation: *'That's probably where I've had the most heartache but I think also the most success in actually working through that.'* She explains how she has changed the feedback process: '*I only want face-to-face feedback and I want it to be in a group setting in relation to each chapter... so if you have conflicting advice you can actually determine that there and also argue it out amongst yourselves. So then I can come away with some clear advice*'. This arrangement has worked for Peta because all supervisors now reach consensus before she expends precious time and energy reworking chapters. While the process of renegotiating supervision arrangements has been difficult ('*that caused me a huge amount of stress*'), the outcome has been successful. Peta has managed to establish a collaborative relationship between all members of the team, organising the group to work together to make decisions about the direction the thesis should take. The sense of being the one holding the reins in the team is clearly empowering for this PhD candidate.

Melissa

Melissa's team comprises two supervisors from the same discipline, one administratively nominated, with more responsibility than the other, although '*they both, I think, have an equal support in my work*'. Melissa makes strategic decisions about how to use the supervisors' skills to advance her project: '*they both have different strengths … they really complement each other*'. Halfway through her candidature, at the time of interview, Melissa describes her satisfaction and enjoyment in the process of research: *'Everybody says a PhD is an isolated experience but I don't see that at all. I love talking to people and collaborating'*. Melissa says that her supervisors ensure that she forms networks both within and beyond her local academic area. Melissa expresses a sense of equality with her supervisors: *'We have the type of relationship where I'm not scared to challenge him … I know he's a professor, but ... we're really honest with each other*'. While she happily acknowledges that she has plenty to learn, she also expresses faith in her ability to succeed and to find a fulfilling career in research and teaching following her degree.

Susan

Susan's research team comprises three supervisors, two of whom are located in industry and a professional body outside the institution. Susan has come into her PhD after several years of working as a research project manager in industry. She has worked with and for all three supervisors in her previous capacity as a project manager, and she perceives the current arrangement as a continuation of previous relationships and responsibilities. Her research is on a topic closely related to her previous job. Susan transfers the skills and management techniques she learned as a member of a research team directly into her PhD research: *'It's helped me a lot, the fact that I've come from a working environment into a PhD ... I know I structure things differently and come from a different point of view*'. For example, she circulates agendas and summaries of meetings in a business-like manner, ensuring all members of the team are kept informed about her progress. She expresses a strong sense of accountability to the individuals and institutions involved, and works efficiently to meet their various requirements and timelines: '*got to make sure this project is moving, that it's progressing and that the Board's getting outcomes frequently ... that pushes me a lot harder ... does keep me very structured and organised on a day-to-day basis*'. In addition to the professional, well-organised and conscientious approach to meeting reporting deadlines and balancing her responsibilities to her employer, industry funding body, and to the university, Susan also actively maintains team cohesion. She takes responsibility for ensuring the team is '*harmonious*', making sure '*everyone's on the same page*', and that the collaboration progresses smoothly. Like Peta, Susan explains that her supervisory team members have '*each got strengths in different areas*', although they were chosen for their affiliations with different institutions and industry bodies, rather than specific disciplines. Nevertheless, they bring different expertise to the project and work together in a flat structure—there are '*no egos*' in this team. Interestingly, Susan notes that the principal supervisor defers to one of the assistant supervisors who had been her supervisor on a previous project.

Nurul

Nurul sits at the centre of a complex team of five supervisors. Each supervisor has been appointed to cover the varied expertise Nurul needs for an interdisciplinary research project. Although the members operate in a relatively egalitarian manner, all finally defer to the principal supervisor.

Nurul interprets her role within the team as one of mediator between the parties, responsible for diplomatically pleasing everyone. She describes meetings of the whole team as challenging: '*a bit intimidating, I usually feel let down for that day, really stressful*'. Perhaps reflecting her Malaysian culture, Nurul explains that she agrees with the contradictory opinions often put forward during meetings, and then has the delicate task of tactfully explaining why she does not take up all of the suggestions: '*So they will see the point why I don't choose this and that*'. She describes her principal supervisor as helpful and supportive in explaining research directions, and also the final arbiter in any disagreements that arise between team members about the progress of the project. Despite a range of strong opinions and paradigms present in the group ('*They're usually busy talking to each other, they like to discuss*'), the overall effect, according to Nurul, is one of harmony. A large part of this appears to be due to Nurul's careful management of the group to ensure that everyone remains involved, feels listened to and respected.

Ahmed

Ahmed has two supervisors from the same discipline, one more senior than the other. He has little access to his principal supervisor, and relies heavily on the junior supervisor. Ahmed has returned to academic life after many years working in industry. He finds himself struggling in this environment rather more than he had expected ('*I think the first year was frustrating for me*'; '*I feel that I'm letting them down, actually, in a way*'). He is apologetic about his lack of achievement: '*Sometimes I blame myself because I didn't have a defined problem*'. Although the reasons for his project delays are complex and multi-factorial, he cites an ongoing issue as the conflicting advice he receives from his supervisors. The problem is not in itself, however, in managing the advice, so much as the hierarchical relationship between the principal and co-supervisor. For Ahmed this plays itself out in ways he finds deeply undermining. During rare meetings with the whole team, the principal supervisor insists on returning to discussion of the basic assumptions underlying the entire project, discussions that Ahmed believes to have been resolved in previous meetings—and resolved more than once—but, Ahmed says, the supervisor appears to have forgotten earlier decisions. This constant return to the beginning is experienced as demotivating, and Ahmed perceives that the co-supervisor automatically defers to the more senior colleague, therefore failing to stand by decisions previously made together: '[he] *couldn't support me in the way I thought he would*'. The result is a

dedicated but disheartened PhD candidate who is battling on, trying to get the work done, but who is rather lost in the system and discouraged by the hierarchical team relations that fail to affirm his efforts.

Matthew

Matthew's supervisory team comprises three supervisors who work in an egalitarian manner, although the principal tends to lead meetings, and the others defer to her expertise on matters of methodology. Matthew describes the supervisors as being poles apart in personality and methodological approach, and this sometimes results in incompatible advice. Matthew does not see this as engendering 'conflict'; rather, he views it simply as difference. He explains that a team dynamic has arisen where, in such instances, one of the supervisors (not always the same person) will adopt a pragmatic role, seeking to determine what overall directions can be formulated from the divide for the research. When commenting on his observations of conflicting opinions among supervisors, he feels himself distanced from the discussion: '*It feels like they'll be having a conversation and I'm an observer ... at other times I'll voice [my opinion] if I feel strongly'; 'Sometimes [I'm] somewhat absent from the conversations, which I don't mind in some ways because something usually comes out of that at the end rather than adding another voice that makes a lot of noise'*. He regards the opportunity to observe conflict within the team as a chance to learn the protocols of academic debate. Like the others, Matthew actively engages and manages the team of supervisors, critically choosing what to take from debates. He says he is also aware of the ways in which supervisors attempt to dodge responsibility for the provision of feedback on his writing ('*Being a team takes the pressure off other members of the panel*'). In response to this he takes specific measures to ensure he receives the feedback he needs from the different supervisors.

Gita

Gita has three supervisors brought on board to provide specific expertise for an interdisciplinary project. All are clear about their roles within the team and the contributions they are expected to make. Gita is a mature-age PhD candidate with an extensive professional career behind her. She has worked as part of an academic team in the past, and has a strong sense of who she is as an academic and as a researcher. When faced with conflicting advice from team members, '*I just give importance on my own ideas*

which one I have to take' and '*make it [the issue] disappear in the next meeting*'. Like many of the other students, she has well-established processes for ensuring that absent members of the supervisory team are kept informed of meeting decisions, sending all members a summary of her progress in the absence of normal fortnightly meetings.

Carol

Carol started her PhD with just two supervisors, then specifically sought out a third, and then a fourth, in order to build the requisite suite of disciplinary specialisations and methodologies required as the research program evolved and took on new directions. Carol finds herself in the delicate position of being a colleague and co-worker of the original three, with the fourth being brought on board to fill a knowledge gap that the other three, finally, agreed was needed. The original three supervisors had been reluctant to engage the fourth member of the team, but Carol's insistence that this was necessary eventually prevailed. '*There is a* lot *of expertise in this team*', Carol remarks, '*the question is whether* I *can integrate it all successfully*'. One supervisor has now largely dropped out of the process, but he perhaps may be '*someone who can look at [the PhD] with fresh eyes at the end*'. Carol puts a lot of effort into meeting with, and coordinating the work of, her supervisors, both jointly and separately. According to Carol, the result has been very successful; the open-mindedness of the supervisors and their commitment to getting productive outcomes has enabled the project to advance, despite their very different research paradigms. Carol sees herself as very much working between opposing disciplinary cultures, where while one supervisor encourages her to '*build up the stories*', another warns her not to '*elaborate*'. Carol deals with this at team meetings by '*having a good laugh*' about the contradictory advice, after which differences are worked through and resolved. Although Carol sees the supervisory team as a necessary response to transdisciplinary PhD projects, she recognises the managerial burden it necessitates. She says that while transdisciplinary work is the '*most informative and useful research that you can do*', there are still enormous problems for PhD students in trying to talk in a coherent way to more than one group of '*silo dwellers*'. In the higher education sector '*we just don't know how to do that yet*', she says. In retrospect, Carol says, she believes it would be preferable to have just one supervisor throughout, as the demands of managing a large team add to the complexity of undertaking a research degree.

Level of engagement and hierarchy in team supervision

Each supervisory team in the sample operates in a slightly different way. Some teams have a pyramid structure in which the principal supervisor has the final say on any decisions regarding the project, as well as final responsibility for the candidature, whereas others work along more flatter and more egalitarian lines. As might be expected, though, these varied structures overlap in complex ways.

Teams that have developed a pyramidal hierarchy can form out of groups that are constituted for reasons of cross-disciplinary expertise, complementary expertise, or to meet pragmatic or institutional requirements. In some cases the principal supervisor provides clear leadership for the team, effectively drawing on other members' expertise to support the project, but controlling the overall direction of the research. In these teams, the principal supervisor is seen as the senior party and final decision maker, to whom others finally defer. The interviews reveal the potential for even a nominal supervisor, who is quite distant from the day-to-day running of the project, to wield this kind of authority; and, unfortunately, this can occasionally be experienced by students as disruptive and demoralising. It is also quite possible within the hierarchical structure for the bulk of the actual hands-on supervision to be provided by more junior supervisors, so that 'principal' here refers more to an administrative title rather than the level of practical contribution.

More often, students in our sample experienced the supervisory team as operating in a more collaborative and less hierarchical manner. Again, this is the case regardless of the reasons for selecting the members of the team. The students describe their supervisory arrangements in terms of a group of peers in which authority, status and decision-making is shared, where all members of the team are perceived as equal contributors to the project. It is possible within this structure, however, for some principal supervisors to take a leadership role at certain points in order to guide discussions. There are also instances reported where the mediating role in debates is taken up by different individuals at different times. In other situations, although the student regards the team as a group of equals, some members are in fact less engaged and/or regard themselves as taking a more junior, 'training' role.

Clearly, 'team supervision' refers to a range of structural and operational types. At one end of the spectrum, team supervision retains at its heart the principal/student dyad, keeping intact the construct of the

controlling supervisor, while allowing for some visibility and moderation of her/his instructions. At the other end of the spectrum, team supervision involves a multi-pronged, collaborative approach to the student's research program, dispensing with many of the traditional notions of supervisory mastery and control.

Managing the team

Managing team relations

A number of key points can be drawn from these student experiences. First, in contradistinction to the prevailing perspective within much of the supervision literature, it is not simply the supervisor's interpersonal skills that are critical for successful research outcomes, but also those of the student. Nor are these gleaned in the research process, but skills they bring with them when they enter the institution.

1. *Team composition*. Most of the students in the sample report that they had sought out supervisors for their team, rather than passively waiting to be assigned supervisors. Their priorities were to establish a team in which compatible members contribute complementary, relevant expertise. Remote supervision, while not regarded as ideal, is acceptable if supervisors meet the other criteria.
2. *Team cohesion*. Having established a supervisory team, students actively work on the cohesion of that team—the 'big love' of our title. This includes ensuring that each supervisor knows that their contribution is respected and appreciated (even if the advice of individuals is not always followed); that communication is maintained across the team; and that conflicting views are resolved in a group setting.

Managing conflict

Team supervision exposes students to more conflict and alternative viewpoints, and undoubtedly this is an additional impost in respect of time, energy and, for many, emotions. Nevertheless, the students in our sample actively respond to the variety of perspectives, collating and balancing conflicting opinions, and finding resolutions that are satisfactory to all team members. On the whole, our interviewees seem to benefit, at least in the long run, from observing academic debate, provided there is team commitment in arriving at agreement about how to proceed. None of the

students we spoke to complained that the research had been compromised as a result of this conflict.

1. *Personality clashes.* It is an advantage if team members have previous professional or personal/social connections with one other, and have already established workable relationships. Students who come into research degree programs from an Honours stream may have a home ground advantage in this respect, having already established rapport with staff and developed some knowledge of their particular strengths and weaknesses. This suggests that team composition should take into consideration not only expertise, but also the quality of relationships among the individuals on the team.
2. *Paradigm clashes.* Based on our small sample, it appears that cross-methodological/cross-paradigm and cross-disciplinary supervisory teams can be viable as long as the individuals on the team are willing to engage in respectful debate, and accept that perspectives that differ from their own can offer something of value to the student and to the project. Part of what comprises a successful team is not necessarily therefore paradigm consensus, but paradigm tolerance, or the willingness of members of the team to openly engage with one another, including at theoretical and methodological levels, to achieve excellence in research outcomes.
3. *Differing opinions on project direction.* The interviewees who manage this successfully use a variety of tactics. Some describe themselves as listening to differing advice, but following the advice of the principal supervisor. Others intervene in discussions by summarising the main points to clarify divergent views, and then inviting the team to assist in reaching a clear direction. In some cases, conflicts trigger students to take control of decision-making, effectively forcing them to assert their independence and enhancing confidence in their abilities.
4. *Differing advice on writing.* Feedback on both structure and expression of written drafts was frequently inconsistent, a cause of particular concern for whom English is an additional language. An effective way students dealt with this was to approach feedback as suggestions rather than orders. Students who manage this well make active decisions about what to take on board and what to disregard, trusting their own opinions as to the validity of the advice. Sometimes these decisions are explained to the team, but not always.

Managing feedback logistics

Finding effective ways of receiving timely feedback on draft chapters is seen by students as key to the success of the project. A common problem in team supervision, as mentioned above, is that individual supervisors proffer advice which conflicts with feedback from co-supervisors. The interviews reveal three main systems for avoiding this problem.

1. *Simultaneous multiple feedback.* One successful strategy involves sending a chapter to all members of the supervisory team, and insisting that all team members meet to provide verbal feedback simultaneously. Thus, any differences of opinion can be openly aired and debated until a resolution is reached. Another strategy is to take copies of all feedback to combined meetings to reveal how advice differs and to work towards consensus. However, one student feels that sending drafts to all supervisors simultaneously has the undesirable effect of allowing each of them to think that the others will take the initiative, resulting in slow, or even no, response from some supervisors.
2. *Serial feedback.* A second system is to send a draft chapter to the principal supervisor, who marks suggestions in track changes and passes it on to the next supervisor, who then sends it on to the next supervisor and so on around the circle. This has the advantage of other supervisors being able to see the advice that their colleagues have given and to respond to that, and has efficiencies in that they do not need to repeat the same advice, but is a lengthy process from the student's point of view.
3. *Selective feedback.* Other students are selective about who they send particular sections to, sometimes showing drafts only to the supervisor with relevant expertise for a given aspect of the research. Some discuss the basic structure and organisation of a chapter with one supervisor, but then make use of another supervisor's writing skills and editing expertise to refine drafts before presenting the final polished version to the original supervisor. In cases where supervisors are on the team to fulfill institutional rather than intellectual requirements, the expectation is that they will not provide developmental feedback, but are kept in reserve to read the final thesis version with fresh eyes, almost as pseudo-examiners.

Managing communication

Email is generally the preferred form of communication outside face-to-face supervisory meetings. Students in our sample typically work actively to ensure that all supervisors are kept well informed and up to date about their progress. The practice of providing every member of the team with written, current versions of decisions and progress effectively avoids much potential miscommunication. Interviewees describe three main aspects of this area of team management.

1. *Circulating agendas* before formal meetings, including notes from previous meetings. This is regarded as an efficient way of reminding team members of the current status of the project and ensuring that any necessary preparations can be made in advance (e.g., searching for an obscure reference planned for discussion, or reading a relevant document).
2. *Sending summaries* of meeting discussions to any supervisors who are unable to attend a meeting. Coordinating meeting times with a group of busy academics can lead to delays if one waits until all concerned are available. This system allows the project to progress while also keeping all parties up to speed.
3. *Reporting content of other discussions* is also seen as valuable to keep all parties in the communication loop. The substance of casual conversations with one supervisor outside of formal meetings, the questions raised and decisions made, are emailed to all others. This is particularly important in situations where the student and one supervisor work in close proximity with significant opportunities for casual discussion, and where the other supervisors' offices are located elsewhere.

Conclusion

Team supervision is sometimes offered as a utopian solution to dilemmas in research training, although in practice it is more complex and demanding for participants, and especially for students, than is typically imagined. However, team supervision does solve some of the persistent issues present in the dyadic model, such as supervisor absence, insufficient breadth of expertise, and unmediated supervisor authority. On the other hand, team supervision raises new issues and challenges that require considered

attention on the part of research supervisors and students, as well as others working in the research training environment.

The clearest finding of the research is that team arrangements, when they are successful, demand significant skill and proactive management from students. Students may of course be managing their supervisors in similar ways within the dyadic relationship in order to succeed. However, within the team setting, the complexity of the dynamics involved, and the centrality of the student within the team, means that the student, rather than the supervisors, must assume the role of project manager.

This suggests the need to revise the assumption that the supervisor is the director of a passive novice. While students may lack expertise in the field and in research, they frequently bring considerable organizational know-how, personal assertiveness, self-confidence and interpersonal skills that contribute to successful management of the project. The bias in our sample was towards extroverted, highly networked individuals. It can be expected that not all students will prove as adept, at least from the outset, at managing their supervisory team. Skill development in team and project management, as well as interpersonal communication, may well be helpful to doctoral candidates. Project management theory (e.g., Cleland & Gareis, 2006; Ireland, 2006; Noakes, 2007) could prove to be a useful resource in this endeavor. It is also important for supervisors to be aware of the different requirements upon students in the team situation and to actively facilitate appropriate skill development. Researcher development programs, for both supervisors and students, should also incorporate discussion on the changing nature of supervision, and of team supervision in particular. We recommend that the management strategies outlined above be disseminated through such workshops.

The findings suggest that what is required from supervisors is not so much more skilful management, as receptivity and flexibility in responding to student needs within a multi-skilled team. Images arising from uneven opposing dyads might be replaced with an image of the supervisor as situated within a larger collaborative space in which the direction of seniority is unpredictable and negotiated within unique and fluid arrangements. This requires students to distinguish between what is a minor inconsistency or issue within the team process, and what is a significant concern that needs to be addressed in order to achieve a successful research outcome.

In the same way that the new milieu alters expectations of supervisors, so must our perceptions of appropriate responsibilities and skills of

students be readjusted. Instead of thinking of the student, and encouraging students to think of themselves, as awaiting and following instruction, we suggest a rethinking of the student as active coordinator and manager of supervision resources. An essential part of this is a shift away from the view of the supervisor as manager of the supervisory team, to a view of the supervisor as a resource to be selectively tapped.

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