## A Pattern Language for Writers' Workshops

James O. Coplien Bell Laboratories cope@bell-labs.com 18 May 1997

with Bobby Woolf, KSC Pattern Language Shepherd

## Introduction

Peer review is a crucial element of the quality improvement process for any document and more broadly for any intellectual work. Most intellectual disciplines rely on a peer review culture for the advancement of knowledge, and those disciplines often focus more on content than on expression. Design reviews and code walk-throughs focus on what might be broken, not on what works. Most refereed journals scrutinize works first against standards of formalism and second, if at all, for readability. The pattern community is less interested in the advancement of knowledge than in the broad dissemination of sound practice, and is equally concerned with content and expression.

Writers' workshops, which come from the creative literature community, provide an alternative to prevailing peer review practice that is well-suited to the needs of the pattern community. Writers' workshops follow a collection of normative behaviors designed to give authors constructive feedback on their work while protecting their dignity. The following patterns document those normative behaviors and the structures that support them.

This is a "cheap" pattern language. The patterns not only should be applied in order, but reflect a chronological (rather than structural) progression. There is no single ideal medium to describe what goes on in a Writers' Workshop. I use patterns here not because they describe structure, but because they provide an ideal form to elaborate the forces that drive these ceremonies.

None of these patterns stand alone; they combine to make a whole larger than the sum of the parts. The patterns interact in intricate ways; I attempt to describe the interactions in the course of the presentation.

This language describes our many Writers' Workshop experiences at Bell Labs. The rationales and forces recall the initial tutoring that the Hillsiders received from Richard Gabriel back in the spring of 1994, at a retreat near Ben Lomond. That's the closest link we have to the creative literature community, which has a lot more experience with this format than we do in the pattern community. I offer this language as capturing practice that has worked well for us, in hopes that others find it useful.

### Overview

The patterns here include:

1. Open Review: How to provide a forum for dialogue that is more effective than anonymous refereed reviews, while preserving the interests both of the author and the reviewers.

2. *Safe Setting*: How to make feedback more open and effective by raising the comfort level, particularly for the author.

3. Authors are Experts: How to balance assessment of content and expression in a work.

4. Workshop Comprises Authors: How to deal with feelings of mistrust for outsiders, those who aren't stake holders, who might throw stones at the work.

5. Community of Trust: How to help authors feel that the experience will help them, rather than tear them down.

6. *Moderator Guides the Workshop*: How to keep things moving and to ensure that the rules are followed.

7. Sitting in a Circle: How to build a sense of identity, community, and openness in the group.

8. Authors' Circle: How to recognize the peer group that builds the Community of Trust.

9. Reading Just Before Reviewing: How a reviewer should avoid over-preparing or underpreparing for the workshop.

10. Author Reads Selection: How to bring focus to the workshop and recognize the humanity behind the work.

11. Fly on the Wall: How to keep the author in the activity without becoming a disruptive presence.

12. Volunteer Summarizes the Work: How to bring focus to the reviewing activity, and to give the author feedback on whether the work is effective in making a crisp point.

13. Positive Feedback First: How to give the gathering a supportive tone, and to start with feedback that will put the author in a receptive mood.

14. Suggestions for Improvement: How to communicate improvements to the work without attacking the author or the work.

15. Author Asks for Clarification: How to give the author an opportunity to solicit more refined feedback without appearing to rebut the feedback that was provided.

16. Thank the Author: How to help the author remember the workshop as a positive experience.

17. Selective Changes: How the author deals with a lack of consensus in the feedback.

18. Clearing the Palate: How to give a sense of closure to the workshop.

The patterns follow Alexander's pattern form. For those unfamiliar with Alexandrian form, it is described in an appendix to the patterns.

### 1. ☆☆ Open Review

... a successful review process depends on cooperation between an author and a group of peers who review the work. The goal of the process is to expand the body of knowledge in a particular community while protecting the integrity of the work produced by the community. What kind of review forum supports the most effective communication between authors and reviewers, supporting dialogue, yet limiting vulnerability and bad feelings?

\* \* \*

**Because peer review is an intensely human process, it is important to consider human concerns.** A painful or onerous process would discourage frequent practitioners. Yet an overly permissive and accommodating process doesn't serve the goal of sustained high quality.

Most refereeing processes use anonymous review. If your review is anonymous, you don't have to worry about how your feedback will affect the way the author perceives you as an individual. Strong reviewer feedback may not be well received by the author, and may be interpreted by the author as a personal indictment or attack, particularly if the paper is rejected. The author may never know you reviewed the paper, so any relationship—personal or professional—between the author and the reviewer is unaffected by the review process. This process depends on a faceless, anonymous review agent such as an editorial board, program committee, or a pool of reviewers "hidden" behind an editor. The review agent is held to be objective, impartial, and expert. The intent is to protect the dignity both of the author and the reviewers.

Yet, in this setting, it's hard to let the author know that the reviewers care about the work or that they have the author's best interests at heart. The author may feel that the reviewers are

cowards for remaining anonymous. And it's more difficult for the reviewers to benefit from the author's appreciation of their efforts. It's hard for reviewers to feel that the author knows they care. The author can't appreciate the reviewer's experience and background, or the broad context that is best explored through dialogue. Dialogue is crucial to the shared understanding that leads to fundamental insights and progress in a work.

#### But open dialogue leaves the reviewers and authors exposed, bereft of the protection afforded by the anonymous review process.

#### Therefore:

Provide an open review forum whose structures protect the dignity both of the authors and reviewers, making a <u>Safe Setting (2)</u> and <u>Community of Trust (5)</u> for both. Control negative author engagement with <u>Fly on the Wall (11)</u> and <u>Author Asks for Clarification (15)</u>. Make the author feel welcome with <u>Positive Feedback First (13)</u>. Develop personal engagement with <u>Sitting</u> in a Circle (7) and <u>Thank the Author (16)</u>.

\* \* \*

A Writers' Workshop format supports the dialogue necessary to effective two-way communication. It improves on the one-way feedback in refereed forums. The feedback has a short delay, which avoids the frustration and coordination problems of long feedback delays.

This pattern distinguishes the practice of the pattern community from that of most contemporary peer review. It is practiced in reading groups, at pattern workshops, and pattern conferences. However, the process for admitting patterns into the published literature of the pattern community still employs a form of anonymous peer review.

## 2. ☆☆☆ Safe Setting

... the pattern community strives to develop a high quality body of literature that improves the quality of life for users, developers, managers, and others in the software community. The creative literature community uses a review format called a Writers' Workshop to improve the quality of literature that is published beyond a small circle of colleagues. Authors clearly can benefit from the feedback of their peers and colleagues. How do you establish a <u>Safe Setting</u> to provide free-flowing input to authors while preserving their dignity?

\* \* \*

There are few things that satisfy authors more than seeing their work published and widely read and applied. For works published without a critical review process, authors will receive their first feedback from the market they aim to influence, which may provide a rude awakening for the author.

## On the other hand, peer review can be equally frightening and demoralizing, as the author is open to criticism from peers who know the material and the author well.

Familiarity with the material makes it possible for these reviewers to provide the largest volume of feedback; familiarity with the author makes it possible for them to "push the author's buttons" in the review process.

### Yet such review is important.

### Therefore:

Provide a <u>Safe Setting</u> where the author can receive useful expert feedback directed at the work rather than at the author, with the goal of preserving the dignity of the author.

\* \* \*

You can help the author feel at home by using the patterns: <u>Workshop Comprises Authors (4)</u> and <u>Authors' Circle (8)</u>, which help provide a peer setting with opportunity for reciprocation; <u>Moderator Guides the Workshop (6)</u>, which prevents the workshop dynamics from getting out of hand; <u>Positive Feedback First (13)</u>, which bolsters the author's sense of contribution and self-

worth; <u>Suggestions for Improvement (14)</u>, which defines the tone of constructive feedback; and Thank the Author (16), where the community formally recognizes the author's contribution.

## 3. 🛠 Authors Are Experts

... the pattern community is building a body of literature to capture expertise, and is particularly interested in practices and techniques that are not intuitive to inexpert practitioners. How do you balance assessment of content and expression in the work?

\* \* \*

### Any given pattern is both a process and a thing, which must be experienced to be described.

Most engineering reviews focus on the technical aspects of the solution itself, rather than on its relationship to any problem, or the tradeoffs or understanding that go into the solution. Even in a technical review where all those factors are present, the opportunity for the literary, humanistic, and social impact of a pattern are lost. And these are the factors that give a pattern the Quality Without A Name.

It is too easy for engineers to degenerate into technical details and to miss the aesthetic and holistic impact of a pattern.

## The nature of patterns is that they are fundamental, essential "laws of nature," which means that it's likely that many people have shared the experience and insights of a pattern.

A good pattern captures an experience that is an important part of Being Alive, tapping deep shared human history and cultural ties.

### The substance of these experiences transcends criticism.

We are taught, as part of good communication skills, never to say "you're wrong" or even "I disagree" to any statement of the form: "I feel that..." People own their feelings. Feelings should not be *challenged*; to do so would violate a Safe Setting (2).

## Yet authors can improve most of their patterns; they can benefit from the sensibilities and experiences of others, particularly as regards their exposition and literary qualities.

If we wrote as well as we owned our feelings, there would be no need for feedback. But human review and interaction has proven itself to improve the quality even of subjective literature.

## The problem is to keep people focused on providing input on the presentation that can be heard and used, and to avoid exploring the solution in too much depth.

### Therefore:

## View authors as experts in the material they present. This implies that the focus of the workshop is on form more than content.

Problematic feedback on the content of a pattern suggests that it may not yet be a pattern.

\* \* \*

Technical soundness of a design, or of the principles behind it, is a staple of software community reviews. Software pattern communities should consider a separate forum, such as a Design Review,<sup>1</sup> that uses traditional review mechanisms to assess the technical merit of a pattern. The exercise should be separate from the Writers' Workshop, which assesses the presentation of the pattern.

Even if the author is not an expert on the topic of the work there isn't much the Writers' Workshop can do to bridle the author or "keep them in their place."

<sup>&</sup>lt;sup>1</sup>. This is a pattern language waiting to be written.

Of course, Writers' Workshops are a good place to explore relationships between patterns, to help weave existing patterns into a broader collection of literature called a pattern language. For example, a reviewer may know of other solutions to the same problem addressed by the pattern being reviewed. By comparing related patterns, authors can refine the context and force sections of their own patterns.

## 4. ☆☆ Workshop Comprises Authors

... as described in <u>Safe Setting (2)</u>, the goals of the writing community can best be achieved only when authors are given feedback useful for evolving their work while preserving their dignity. **How should the forum deal with feelings of mistrust for outsiders, those who aren't stake holders, who might throw stones at the work?** 

\* \* \*

The best feedback comes from authoritarian sources, and most review settings elicit the feedback of experts (and those with vested interests) in an authoritarian setting. This posture can contribute to a feeling that critics are not accountable for what they say, and that leaves the author in a disadvantaged position. Authors feel uncomfortable while in this position.

There is no reason that an author should trust reviewers except on the basis of their reputation. Trust based on subject matter reputation creates a hierarchy in the review community, structuring "those who know" against "those who write." This breaks down the sense of community and leaves the author vulnerable to feelings of inferiority.

Weinberg notes that one of the strongest power positions is learned in our grade school years, where the teacher is in the position of power to convey ideas to the student, who is passive.

# Even though expert feedback is important, pattern authors are usually the most expert at communicating the pattern they have experienced again and again. What nature of expertise can best improve the work?

In the pattern community, it is best that Authors Are Experts (3) in the material they compose.

### Therefore:

Assemble the workshop membership from other authors who are interested in the material, who have a stake in the material, or whom the author otherwise believes will contribute to the goal of improving the work. If all the participants are authors, it contributes to an egalitarian community.

Authors know and appreciate the Writers' Workshop culture and are less likely to create disruptive faux pas than a casual outsider would.

As authors, the reviewers have experience with the pattern form and its effectiveness, and can contribute ideas to improve the expression of the idea.

\* \* \*

This principle derives from the prevailing practice of the creative literature review community. Richard Gabriel relates that he knows only of one major review setting where this principle is violated (Bread Loaf), but that, even there, they are explicit about putting the rule aside.

You wouldn't engage a bereavement expert to improve a poem on dying, but an accomplished poet.

The author may invite non-authors that they trust to improve the work while maintaining the sense of community.

## 5. ☆☆☆ Community of Trust

... a group of authors and a moderator are assembled to review a literary work. The author is bringing a work for review, a work in progress, and seeks help in refining the work. This group will develop into a community of trust that can serve several authors. At a conference like PLoP, there are many papers to review. **How do you best utilize this group, and give the author confidence that the group will build up the work rather than tear it down?** 

\* \* \*

### An effective Writers' Workshop is built on a community of trust.

Trust is a key ingredient in a <u>Safe Setting (2)</u> for reviews. One important objective of the Writers' Workshop format is to guarantee a community of trust, so the author's dignity is retained.

The author is willing to release unpolished work for review in this setting, knowing that everyone knows that it is unfinished work, which implies a different review perspective than for typical, polished, conference submissions.

## However, the review of a single work rarely takes longer than an hour, which is not enough time to cement long-term relationships.

A group of people can develop trust only through many shared experiences. If a Writers' Workshop is to provide a community of trust, it must be together for a period of time.

The Writers' Workshop reviewers could participate in an "Outward Bound" exercise to build trust; this is how the Hillsiders built their initial community of trust. However, there often is no time for such exercises, and such exotic measures are frowned upon in the mainstream corporate cultures that patterns mean to serve.

### Therefore:

Organize Writers' Workshops by areas of interest that tie together the works of the authors involved. The authors/reviewers and gallery should remain with the same workshop for the duration of the reviews of all authors' works.

Manuscripts are not published outside the workshops in which they are reviewed until the author refines the works and offers them for wide publication.

\* \* \*

At PLoP, we start to build trust by assigning a Pattern Shepherd<sup>2</sup> to help the author prepare his or her work for the workshop. The shepherding process helps filter out the most embarrassing misfits, so that all papers enter the forum with the benefit of the shepherd's insights on what makes a good pattern.

## 6. ☆☆☆ Moderator Guides the Workshop

... a set of well-meaning, qualified people (Workshop Comprises Authors (4)) have gathered with an author to review a work such as a pattern or pattern language. How do you keep things moving and ensure that Writers' Workshop guidelines are appropriately followed?

\* \* \*

A diverse group of people makes only clumsy progress without guidance from san authority who might (even arbitrarily) decide on the format, the duration of phases of the workshop, etc.

Most groups naturally seek a leader.

Someone needs to make sure everyone is given a chance to speak, and that egos are kept in check. In general, someone should act as an authority to represent the interests of the

<sup>&</sup>lt;sup>2</sup>. This is a rich pattern language that needs to be written down.

## workshop as a whole for everybody, and in particular, to represent the interests of the author, especially when he is kept silent (<u>Fly on the Wall (11)</u>).

### Therefore:

### Each session is be led by an experienced moderator, who guides (not directs) the discussion.

The moderator is responsible to see that all runs smoothly. Done well, moderation is a background task: the Writers' Workshop tradition alone is usually enough to guide the main flow of the activities.

\* \* \*

The moderator has many tasks and needs many skills. There are many different moderation styles, including <u>Active Listening Moderation</u>,<sup>3</sup> where the moderator affirms (feeds back) everything that is said. There are more passive styles of moderation.

Some moderators will call on reticent participants to speak; most moderators are more hands-off.

Moderators teach the remaining patterns to the group (by example and light turning) and guide their use, subject to the moderator's style. Depending on the setting, the moderator may be responsible for securing copies of the work for the reviewers. The moderator initially welcomes the author and invites the author to read a selection from the work. The moderator then thanks the author and invites him or her to become a Fly on the Wall (11). The moderator invites a volunteer to summarize the pattern. The moderator makes sure that no negative criticism leaks into Positive Feedback First (13). The moderator decides when the positive feedback has reached diminishing returns, and segues into Suggestions for Improvement (14). The moderator brings that session to a close, and welcomes the author back into the inner circle, encouraging them to ask questions of clarification. The moderator leads the Thank the Author (16) ceremony, and invites a Clearing the Palate (18) speaker.

The moderator may also arrange for a scribe to help the author record major discussion points.

There should be a separate Pattern Language for Workshop Session Moderation.

## 7. ☆☆☆ Sitting In a Circle

... authors are assembled to review the work of a colleague. Just as the symmetry and geometry of an office space of set of buildings can thwart or support "what happens there," so can the simple organization of room furniture. How should a Writers' Workshop room be laid out to facilitate the desired patterns of communication, to create the right sense of community?

\* \* \*

A Writers' Workshop is a community of trust and support, and the room structure should reflect that. Most meeting rooms are set up with tables and chairs. The tables help people take notes, provide a place for beverages, and support those who sag as the meeting drags on.

However, tables also provide a shield to hide behind. While the presenter may feel vulnerable at the front of the room, the rest of the attendees feel shielded behind the sturdy ramparts of the meeting room tables, which are rarely flimsy card-table affairs, but formidable hardwood structures. It is convenient to hide behind them.

Yet, in a Writers' Workshop, we want to make the author feel comfortable, as if the reviewers are not attacking from behind defended bulwarks.

### Therefore:

Seat the reviewers in a circle. Both the author and moderator form part of the circle; the structure is fully egalitarian. Don't use tables: all participants should present an equally vulnerable (or supportive) face to the circle as a whole.

Beverages can go on the floor. Except for the author, who may wish to bring a clipboard to take notes, few of the participants should be writing during the review.

\* \* \*

The author may stand in place for <u>Author Reads Selection (10)</u> or, if the author is so inclined, may move to the center of the circle.

During the review proper, when the author is a  $\underline{Fly}$  on the Wall (11), it is sometimes customary for the author to move outside the circle.

<sup>&</sup>lt;sup>3</sup>. A pattern waiting to be written.

Because authors form the <u>Community of Trust (5)</u>, they might form their own <u>Authors' Circle (8)</u> inside the circle of observers, in fishbowl style.

## 8. ☆☆ Authors' Circle

... the reviewers are assembled <u>Sitting in a Circle (7)</u>, ready for the review process. The circle brings the full community in direct contact with the author and with each other.

It has become common practice to invite observers to Writers' Workshops: where do they sit?

\* \* \*

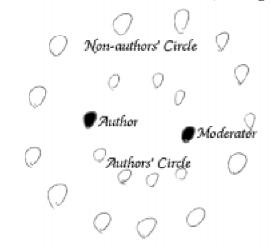
Bringing non-authors into the literal and figurative inner circle might cause discomfort for the author, and can be contrary to a <u>Safe Setting (2)</u>.

On the other hand, the Writers' Workshop is a good learning opportunity for those outside the literary community, and they should be welcome.

But just because they are in the room doesn't mean that they are part of the <u>Community of</u> <u>Trust (5)</u>. If they are made part of the circle, they will feel like participating; yet they don't yet know the conventions for effective participation. Excluding them altogether is disengaging.

#### Therefore:

Arrange the room in two circles. The inner circle contains the authors and the moderator. The outer circle, or "gallery," is for non-authors.



Authors that wish to remove themselves from active participation should also remove themselves to the outer circle, rather than sitting passively in the inner circle: The author being reviewed (and the moderator, representing the author's interest) should expect participation from all members of the inner circle.

\* \* \*

This pattern strongly recalls Workshop Comprises Authors (4).

The circle makes it easy for everyone to see the author eye-to-eye during <u>Author Reads Selection</u> (10), <u>Suggestions for Improvement (14)</u>, and <u>Thank the Author (16)</u>. All the reviewers can see each other during the dialog of <u>Suggestions For Improvement (14)</u>. The outer circle also provides a context for the <u>Fly on the Wall (11)</u> author to retire to (behind the <u>Authors' Circle</u>) as the work is being reviewed.

## 9. A Reading Just Before Reviewing

... the panel of reviewers is assembled, and their work is set before them. The goal of the Writers' Workshop is to improve the work while validating the author. But reviewer input should be validated, too. Reviewers come in good standing because the <u>Workshop Comprises Authors (4)</u>, but reviewers should become familiar with the work so their specific feedback is credible. **How do you avoid under-preparation or over-preparation for a workshop?** 

\* \* \*

Everyone who critiques a pattern should have read it. It's possible to critique a pattern from expert knowledge of the subject matter, but here, we presume that <u>Authors Are Experts (3)</u> and that the presentation, the "experience" of the pattern, is the focus of the review.

A reviewer can spend many hours thoroughly reading a pattern and studying for its review.

A reviewer may research references and track down every possible lead. But most of the leads will be dead ends, and most relate to technical details beyond the technical scope of the review.

On the other hand, many reviewers tend to give a paper only superficial review, or may pour over the work in real time.

These reviewers are not only a distraction to the review process, but they do the author a disservice.

If some reviewers prepare thoroughly, their detailed reviews are likely to swamp the input of other reviewers. The volume of well-considered input may easily mask the sublime insight produced by a spontaneous review.

### Therefore:

Reviewers should read the pattern just before reviewing it. The pattern will be fresh in their minds; the pattern's emotional impact remains with the reader. This is sufficient to assess the literary and aesthetic qualities of a work.

\* \* \*

Some reviewers may read and annotate other author's works far in advance. If the author permits, such reviewers may provide written comments to the author, but only after the workshop is done.

## 10. ☆☆☆ Author Reads Selection

... the reviewers have read the work (<u>Reading Just Before Reviewing (9)</u>) and now the review process begins. How do we get to know the authors a bit, to make them feel like valued people, more than just the vehicle for the work being discussed?

\* \* \*

It is hard to know what's going on inside authors' heads unless they are given an opportunity to speak.

The goal of a Writers' Workshop is to improve the work while preserving the author's dignity. To appreciate the need to be sensitive to the author and his or her feelings, we want to get to know them a bit.

But if authors speak when they most want to during the feedback, it stifles and throttles the feedback process.

And we foresee the pattern Fly on the Wall (11) that derives from this force.

An author brings a rich constellation of insights, experiences, and stories, some subset of which have been captured in pattern form, but many of which remain in the author's head.

Patterns attempt to capture that knowledge, so that the reader can re-create the experience of the expert that led him or her to appreciate the pattern.

#### If authors extemporize while reading their patterns, we gain additional insight.

People love to hear stories, and some people love to tell stories. Most authors can tell many stories that led them to recognize the pattern they describe, though the pattern itself doesn't capture most of that folklore (for sake of compression and conciseness).

## But a pattern must stand on its own. One should be able to understand and use a pattern on its own merits, without the support of author interpretation.

Patterns form a broadly disseminated body of literature that helps readers develop some of the expert's insights, which relieves the expert from having to be everywhere at once. Readers shouldn't depend on first-hand interpretation from the author, because the author won't always be accessible to the reader.

### Therefore:

## The author stands and reads a selection of his or her choice. The author may read only the material that is available, verbatim, to the reviewers.

By letting authors read their works we recognize their presence and welcome them to the forum.

Authors may read any selection they like. The section should be short enough to not bore the audience.

We can hear the voice inside the author's head, the internal dialogue, behind the pattern.

\* \* \*

The goal is to convey what is important to and about the author; the reviewers have already read the pattern, so they know its content. If even the inflection of the author's voice conveys interpretation, the reviewers should be on guard that the pattern can be improved to capture the importance of such inflection.

By letting authors read a selection of their choice, the reviewers are afforded insight into the authors' priorities for what is important, for what is beautiful, for what they are proud of.

Author Reads Selection also serves as a formal beginning to the session, to help the reviewers become mentally centered and fully present.

That the author stands here anticipates the balanced response of Thank the Author (16).

## 11. ☆☆☆ Fly On The Wall

... after the <u>Author Reads Selection (10)</u>, the reviewers are seated in the <u>Authors' Circle (8)</u>, ready to give feedback on the work. What does the author do now? **How do you keep the author engaged, yet at an objective distance?** 

\* \* \*

The author should hear the comments directly, and should know who said them, so they have the fullest possible context.

Yet the comments are likely to be more frank if the author isn't present.

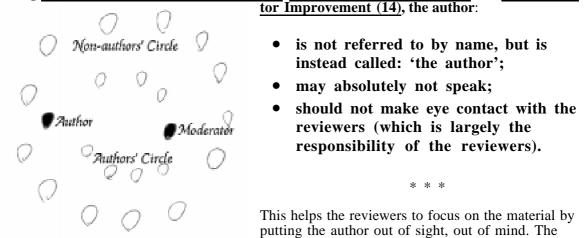
## But too much frankness contradicts <u>Safe Setting (2)</u>. And the discussion should not be allowed to become an argument between the author and a reviewer.

The point is not what the author thinks about his own work or what he meant to say, but what the reviewers think and what they think he said. Authors' often wonder, "I wonder what goes though my audience's heads when they read my paper;" this is their chance to find out, but they should

stay out of the discussion and not influence it so that they get the audience's opinions, not their own.

### Therefore:

Ask the author to step out of the <u>Authors' Circle (8)</u> and become a <u>Fly on the Wall (11)</u>. During Volunteer Summarizes the Work (12), Positive Feedback First (13), and Suggestions



author can still appreciate <u>Positive Feedback First (13)</u>, but is distanced from the personal impact of Suggestions for Improvement (14).

## 12. ☆☆ Volunteer Summarizes the Work

... the reviewers are <u>Sitting in a Circle (7)</u> and the author has become a <u>Fly on the Wall (11)</u>. At this point, the reviewers have all the information they will get before making their assessments. **How can the group telegraph, to the author, that they're at least starting on the right track?** 

#### \* \* \*

## A good pattern appeals to our intuition, and the author can gauge the effectiveness of a pattern in part by how well it appeals to the intuition of those who read it.

A good pattern touches us deeply. After all the words have past, we are left with a single impression, and its feelings; a gestalt that touches our own experience and recalls deep (and sometimes inarticulate) knowledge.

## Yet few review processes yield to intuition; most rely on detailed, rational arguments whose detail is sometimes irrelevant if the larger point is lost.

Most Design Review<sup>4</sup> settings dissect a design into parts and then review each part on its own terms. It's more important, with a pattern, to assess the effectiveness of the whole. Understanding the forces of the whole naturally leads a designer to a suitable implementation and other details.

### Therefore:

## After the <u>Author Reads Selection (10)</u>, the moderator asks a volunteer to summarize the work in his or her own words.

If the summary validates the author's intent, the author has a degree of confidence that the pattern is intuitive.

<sup>&</sup>lt;sup>4</sup> A pattern language waiting to be written.

If the summary is off-base, the rest of the review may follow the summary and be for naught—but the author has important information about the effectiveness of the pattern. Also, a summary captures only a single viewpoint, which the author can balance with feedback from other reviewers.

\* \* \*

It's possible to solicit multiple summaries by asking if there are dissenting summaries after the first one is given. However, this usually leads to a degenerating discussion that defers the business of Positive Feedback First (13), so many moderators ask only for a single summary.

The summary provides a jumping-off point for <u>Positive Feedback First (13)</u> and <u>Suggestions for</u> <u>Improvement (14)</u>.

## 13. ☆☆☆ Positive Feedback First

... the reviewers are <u>Sitting in a Circle (7)</u>, the author is a <u>Fly on the Wall (11)</u>, and the pattern has been summarized (<u>Volunteer Summarizes the Work (12)</u>). The reviewers are ready to provide feedback to the author. How do they provide feedback so it has the best chance of being successful, and of setting the proper tone?

\* \* \*

### When we review literature, there are bits that we enjoy, and bits we'd like to improve.

## Yet most review settings dwell on the improvements, since the parts that we like need no work, and therefore need no mention.

Most engineers are trained to find and solve problems. Most engineering evaluations focus on problems, on areas for improvement, consistent with their training and practice. But, more broadly than this, we seem to be better at finding "misfits" than we are at noticing the lack of patterns or constructs that support quality. Quality is more than the lack of misfits, but Western, reductionist criticism focuses on the negatives, leaving the positives unmentioned.

The problem with this approach is that it leaves doubt in the mind of the author about the value of the paragraphs, or the styles, or the organization, that were left unmentioned. Did the reviewers leave them out because they ran out of time? Because they were less offensive than the problems they mentioned?

## This approach leaves authors feeling insecure, with the positive side of their contribution left unrecognized.

The author may also become confused and remove a well-done bit of text to address feedback that should be dealt with elsewhere.

### Therefore:

## Start the review process by accentuating the positives: what works, what is good, what the author should leave unchanged in the next iteration of the work.

This makes it explicit what is good and should be left alone during editing. This engages the author in the process from the beginning.

\* \* \*

By making a conscious effort to surface the positives, it underscores the author's contribution and makes the review a <u>Safe Setting (2)</u>. By doing positives first, their importance is underscored, and the author starts off encouraged rather than discouraged. That means the author is more likely to hear the rest of the feedback—much more so than if the feedback had been given in the other order.

## 14. ☆☆☆ Suggestions for Improvement

### Alias: Constructive Feedback

... the reviewers gave <u>Positive Feedback First (13)</u>, but still need to tell the author what can be improved on the next round of editing. The author is still sequestered as a <u>Fly on the Wall (11)</u>. **How do you point out "problems" without attacking the author of the work?** 

\* \* \*

The main output of the Writers' Workshop is an improved piece of literature. Some improvements correct sins of omission; most authors appreciate learning about these, as they don't attack anything produced by the author (only the lack of something produced). Other improvements require that the author remove or change manuscript text. Human nature sometimes equates imperfection in a creation with the imperfection of its creator.

We can divide these criticisms into two kinds: criticism of content, and criticism of the presentation. Because <u>Authors Are Experts (3)</u>, the focus of Writers' Workshops is on presentation, though content criticism is fair game.

Engineers take technical criticism harder than any other. Design Reviews<sup>5</sup> are better than Writers' Workshops to support the detailed, reductionist analyses necessary to validate technical issues. Writers' Workshops focus more on presentation and aesthetics (<u>Authors Are Experts (3)</u>). But an attack on presentation, language, and aesthetics can be equally devastating, as authors may construe the criticism as applying to their personality, intelligence, or to their upbringing in a culture different from the one in which they work.

## Unsupported criticism is difficult to take, particularly if the author cannot respond, as provided by <u>Fly on the Wall (11)</u> and <u>Author Asks for Clarification (15)</u>.

Destructive criticism not only has the possibility of making the author uncomfortable, but provides no outlet for learning.

### Therefore:

Provide constructive feedback to the author; that is, offer no criticism unless it is accompanied by a well-considered, actionable suggestion for improvement.

Erich Gamma suggests: Provide constructive feedback by first stating the problem, followed by a suggestion.

Though responsibility lies with each reviewer, the moderator can help guide, remind, and support people in giving constructive feedback. Good moderators do this in an unobtrusive way.

\* \* \*

No review is without risk, and authors take some risk of having their world view upset by a review; that's how learning takes place. The main result of <u>Suggestions for Improvement</u> is that the author feels that colleagues are trying to help, that they care that the author's dignity be preserved, that they offer their own insights to increase the knowledge of the author. The second result is that the author actually learns from constructive criticism.

Ralph Johnson adds: "Forcing all criticism to include a way to improve is limiting, because it might be that the criticism that one reviewer makes could be answered by another. But then that second reviewer would probably have come up with it anyway, so you aren't losing much by limiting criticism, and you are gaining a lot."

This pattern is a high point in the workshop, the high point of tension for the author. At the end of this section, the <u>Author Asks for Clarification (15)</u> on any issues that remain from the <u>Suggestions for Improvement</u> (and from other sections as well, but most will be from here).

<sup>&</sup>lt;sup>5</sup> A pattern language waiting to be written.

Remaining angst about this section is brought to closure in <u>Thank the Author (16)</u> and <u>Clearing</u> the Palate (18).

## 15. ☆☆☆ Author Asks for Clarification

... at the end of the formal review input of a Writers' Workshop, the author may be anxious about some of the things that were said. Until now, the author has been a <u>Fly on the Wall (11)</u>, but we can't have a <u>Safe Setting (2)</u> unless the author is given a chance to speak (beyond just reading the work as in <u>Author Reads Selection (10)</u>). **How do we give the author a chance to speak without starting a debate?** 

\* \* \*

#### Not all reviewer comments stand alone.

In a Writers' Workshop, reviewers are providing comments on-the-fly, comments that may not fully articulate the reviewer's rationale.

### Reviewer comments can be ambiguous, confusing, or unclear in many ways.

It doesn't serve the author (and the work) well if the author leaves before the reviewers clarify their comments.

#### Therefore:

#### The Author Asks for Clarification after the moderator calls an end to the formal comments.

Note that this is not an opportunity for the author to clarify his or her position with the reviewers, since the pattern must stand on its own. The information flows from the reviewers to the author, not vice versa.

If authors harbor disagreements with any reviewer conclusions or remarks, they should take them away from the Writers' Workshop in silence. Such disagreement or remarks provide information for the author, information the author can use to clarify the pattern on the next iteration. By mutual agreement, the author and reviewer can discuss deeper issues (and, particularly, technical issues) in the afterglow of the workshop.

\* \* \*

This brings the ceremony to closure and ties up all the formal loose ends. Further patterns, like <u>Thank the Author (16)</u>, provide more complete emotional closure. The author can now take the feedback and iterate further on the pattern, making <u>Selective Changes (17)</u>.

## 16. ☆☆☆ Thank the Author

... authors invest much of their time, and risk their reputations by putting their intellectual achievement out for criticism. By doing so, they can contribute richly to the body of literature on which practice is based, and by which the industry moves forward. The authors deserve our gratitude. How do we convey our gratitude so that the author leaves the workshop encouraged?

\* \* \*

#### People seek and need recognition for their valuable contributions.

We feel good when we help someone, particularly when we are recognized for our contribution. It is a high point in an engineer's work program when a customer thanks or recognizes them for having solved an important problem.

Most of the Writers' Workshop focuses on evaluating and scrutinizing the author's work, which elicits an emotional response that's antithetical to that engendered by gratitude.

Writers' Workshops can be draining on the author; authors must be keenly alert and "keep their guard up" during a review, even though they have no chance to retort.

#### Therefore:

# End the Writers' Workshop with a display of gratitude for the author. It's particularly effective if the moderator asks the author to remain seated while all reviewers stand and applaud the author.

This brings the ceremony to closure, helps authors let down their guard and fully recognize that the people around them are there to support and refine the work, and that they appreciate the author.

\* \* \*

Broad publication, in a recognized and highly reviewed journal or book, also is good for the author's stature and self-image.

Gratitude has been called the most powerful of human emotions.

## 17. ☆☆☆ Selective Changes

Alias: Author's Prerogative

... the workshop is done, the author has received <u>Suggestions for Improvement (14)</u>, and is working on the next iteration of the pattern or pattern language. **How should the author incorporate workshop feedback into the work?** 

\* \* \*

### Authors may receive diverse, even contradictory, feedback on their work.

It's an advantage to have a diverse collection of reviewers, since chances are good that they'll think of something you didn't think of. On the other hand, such a broad group of reviewers may not provide a consensus view.

#### Indeed, there is nothing about the Writers' Workshop format that drives toward consensus.

This leaves the author with a dilemma: which reviewers' opinions should the author act on?

## Furthermore, the author may disagree even with unambiguous opinions that come out of the Writers' Workshop.

Should the author be bound to take the advice of the workshop?

### Therefore:

The author is not bound to the verbatim advice of the Writers' Workshop. Rather, the experience might help the author develop a new perspective, which in turn inspires the author to change the work. There may be simple changes that the author chooses to make if convinced they are worthwhile. But, in all cases, changes are at author discretion: the results of the Writers' Workshop are the property of the author.

\* \* \*

Sometimes, a work has the benefit of feedback from multiple workshops. Issues ignored in one workshop may resurface in another; good writers put their prejudices aside and heed these hints.

## **18.** ☆ Clearing The Palate

... after the work of a Writers' Workshop is done, peoples' heads are full, emotions run strong (perhaps both high and low). There is a sense of closure, perhaps feelings of exhaustion. Different

people experience each workshop differently. How do you clear peoples' heads, preparing them for what comes next?

\* \* \*

#### A steady stream of Writers' Workshops can be draining.

People invest much of themselves—emotionally, intellectually, even spiritually—in a Writers' Workshop. The experience can leave some participants unfocused and off-center as the workshop's issues race around in their mind.

For example, reviewers yearn to start working with authors to give them more detailed feedback (which would usually not be useful, as most authors are too drained, distraught, or emotionally high to accommodate them) or to have some other outlet for their thoughts and opinions.

### A distraction can bring the group back to its center.

By shifting the group from left brain to right brain, or from a technical topic to a personal topic, or by focusing on something entirely irrelevant, the group can clear out the aftermath of the previous workshop and move on to what follows.

#### Therefore:

At the close of each review, ask for a volunteer to "say something irrelevant." The subject can be a joke, an anecdote, a short story, a puzzle—anything unrelated to the prevailing topic matter of the workshops. <u>Clearing the Palate</u>, analogous to the neutral foods eaten between wine tastings, readies the group for what comes next.

This also helps exercise and engage parts of the brain that would otherwise remain unused.

\* \* \*

This is one of a family of related patterns, another one being Clearing the Room with a Bad Joke.

This sets the stage for a break, another Writers' Workshop, or for the end of a session.

This section also "puts the session to bed" and brings to closure any anxieties harbored by the author of the previous session, worrying "about what will happen to them next."

## Acknowledgments

Many thanks to Linda Rising and Ralph Johnson for comments on earlier iterations of these patterns. Special thanks to Bobby Woolf who, as PLoP shepherd for these patterns, provided many particularly useful comments.

An earlier version of these patterns was published as "Writers' Workshops" in C++ Report 9(3), March, 1997.

## Appendix—Alexandrian Pattern Form

From Software Patterns, by Jim Coplien, SIGS Books, 1996.

Alexandrian Form, from Christopher Alexander's work, is the original pattern form. The sections of an Alexandrian pattern are not strongly delimited; the major syntactic structure is a "Therefore:" immediately preceding the solution. Other elements of the form are usually present: a clear statement of the problem, a discussion of the forces, the solution, and a rationale.

Each Alexandrian pattern usually follows an introductory paragraph that enumerates the patterns that must already have been applied to make the ensuing pattern meaningful. The pattern itself starts with a name and a confidence designation of one, two, or three stars. Patterns with three stars

are the ones in which the authors have the most confidence because they have empirical foundations. Patterns with fewer stars may have strong social significance, but are more speculative.

Here is Alexander's own description of his form:

For convenience and clarity, each pattern has the same format. First, there is a picture, which shows an archetypal example of that pattern. Second, after the picture, each pattern has an introductory paragraph, which sets the context for the pattern, by explaining how it helps to complete certain larger patterns. Then there are three diamonds to mark the beginning of the problem. After the diamonds there is a headline, in bold type. This headline gives the essence of the problem in one or two sentences. After the headline comes the body of the problem. This is the longest section. It describes the empirical background of the pattern, the evidence for its validity, the range of different ways the pattern can be manifested in a building, and so on. Then, again in bold type, like the headline, is the solution—the heart of the pattern—which describes the field of physical and social relationships which are required to solve the stated problem, in the stated context. This solution is always stated in the form of an instruction—so that you know exactly what you need to do, to build the pattern. Then, after the solution, there is a diagram, which shows the solution in the form of a diagram, with labels to indicate its main components.

After the diagram, another three diamonds, to show that the main body of the pattern is After the diagram, another three diamonds, to show that the main body of the pattern is finished. And finally, after the diamonds there is a paragraph which ties the pattern to all those smaller patterns in the language, which are needed to complete this pattern, to embellish it, to fill it out. (Christopher Alexander, *A Pattern Language*, 1977, pp. x-xi)