Toward a Cognitive-Pragmatic Account of Patient Decision Aid as an Emerging Genre

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Studies of emerging genres have tended to examine genres in the contexts of new media (Miller and Kelly 2017). Furthermore, there lacks an empirical understanding of emerging genres. Although change in technology-enhanced media plays a crucial role in the emergence of genre, other factors may be also significant.
This study investigates the cognitive-pragmatic motivations for the emergence of a genre.

Based on an emerging genre of health communication called Patient Decision Aid (PDA), this study shows that latent in its emergence are tensions and struggles, which are mobilized by a new conception regarding how a treatment decision is made and involve reshaping the key aspects of discourse and their interactions: participants, purpose, medium, language, prior discourse, and the world.
Since how these facets work is not always transparent in discourse, this study analyzes both PDAs themselves and documents written by PDA developers, the latter of which contain the background and thought shaping the production of Chinese-language PDAs.
It aims to answer two questions:

- What insights into the emerging genre can be derived from the empirical data that shape and underpin the design and development of PDAs written in Chinese?

- How can such insights contribute to developing a cognitive-pragmatic theory of genre?
Literature review
2.1 PDAs as an emerging genre

The paternalistic decision-making model in which the doctor makes a treatment decision for the patient has been prevalent in medical practice. The model has caused disputes, especially when the outcome of the treatment is disappointing.
PDAs have emerged in a milieu of medical culture that contrasts with the paternalistic approach and promotes shared decision making (SDM), a treatment decision model that has four key features:

- at least both physician and patient are involved,
- they share information (e.g. physician’s medical knowledge and patient’s personal values),
- they take steps leading to a consensus,
- and they reach a treatment agreement (Charles, Gafni & Whelan 1997).
2.1 PDAs as an emerging genre

The Ottawa Hospital Research Institute, famous for its pioneering work in developing and implementing SDM, defines patient decision aids (PDAs) as “interventions designed to help people make specific, deliberative choices”.

2.1 PDAs as an emerging genre

PDAs supply “information on the options and outcomes that are relevant to a patient’s health status, and clarify personal values” and “are intended as adjuncts to counseling”.

In other words, they are communication tools that facilitate the implementation of SDM in medical practice and counseling.
2.1 PDAs as an emerging genre

Because PDAs are still being developed in some parts of the world, the social and cognitive forces that have shaped their emergence are of particular interest.

Take Taiwan for instance. The Joint Commission of Taiwan (JCT hereafter) is an organization funded by Taiwan’s Ministry of Health and Welfare, Taiwan Hospital Association, etc. Its aim is to enhance Taiwan’s healthcare quality and execute health policies.
2.1 PDAs as an emerging genre

As a powerhouse that contributes to the development of PDAs in this context, The JCT has organized a series of workshops in which they taught domestic health professionals about SDM and PDAs.

In 2016 they designated a set of 20 health topics and hosted a competition for the design of PDAs for the designated health issues and selected good ones, which are eventually validated, released and used in hospitals.
2.1 PDAs as an emerging genre

The Ministry of Health and Welfare has built an online platform devoted to SDM where such information and updates about PDAs are available.

https://sdm.patientsafety.mohw.gov.tw/Index
2.1 PDAs as an emerging genre

Therefore, what the organizations have promoted, suggested and advised for or against plays a key role in shaping the development of PDAs and informs us of the process involved in the emergence of this genre.
2.1 PDAs as an emerging genre

There has been growing interest in research into PDAs in relation to medical practice. Among the various issues that have been examined are

- the effects of PDAs (O’Connor et al. 1999, 2007; Sepucha et al. 2013),
- criteria for assessing their quality (Volk et al. 2013),
- feedback from clinicians (Ozanne et al. 2014),
- and connections between using PDAs and outcomes of health improvements (Clever et al. 2006; Lin et al. 2005; Malm et al. 2003).
These studies were largely based on evidence from English-speaking countries. To date, few studies deal with Chinese-mediated PDAs (cf. Liao et al, 2017), let alone approach the topic in terms of genre. Furthermore, because of its being relatively new in Chinese speaking contexts, the genre provides a rich resource for an empirical investigation into the factors shaping the emergence of the genre.
2.2 Genre as metaphor

Fishelov (1993) described four analogies or metaphors that dominated in genre theory:

- genre as families,
- genre as biological species,
- genre as institution,
- and genre as speech acts.
Genre as families elucidates possible connections among certain genres or subgenres.

For example, PDAs are similar to several genres of health communication such as leaflets conveying health communication and articles delivering health information to the general public.

Nevertheless, PDAs differ from them in form and content and are intended not simply to communicate health information, but to assist the patient in making a health decision (see Section 4.1).
Genre as biological species illustrates the evolution, development and/or decline of genre. PDAs are still being developed, and the medical knowledge made known in them also evolves as medical technology and knowledge advances.

Genre as institution delineates the socio-institutional force that shapes the development of genre. This metaphor explains the fact that an organization (e.g. the Joint Commission of Taiwan) plays an essential role in promoting PDA-mediated SDM. However, it remains unclear what institutional considerations shape the production of PDAs.


Genre as speech acts addresses the functions or actions that genres perform (see also Bazerman 1994). PDAs do not simply provide health information to the public; instead, they lead patients concerned about particular health issues through a process that results in making a joint decision. They restructure several phases and subgenres of health communication and develop a configuration that covers the existing subgenres and yet differs from them (see Section 4.3).
Building on Fishelov’s metaphorical characterization of genre and alluding to other previous studies, Swales (2004) added two more genre metaphors – *genre as frame* and *genre as language standard* – and illustrated the key features of genre in terms of the set of six metaphors.

*Genres as frame* captures both the perspective that motivates the action of the genre and the thought or knowledge to be conveyed (Bazerman 1997).
2.2 Genre as metaphor

**Genre as language standard** highlights linguistic standards and generic forms that operate in the use of genre. This metaphor sees language standard as embodying constraint and power.

As Devitt (1997: 54) puts it, “[o]nly when we understand genres as both constraint and choice, both regularity and chaos, both inhibiting and enabling will we be able to help students to use the power of genres critically and effectively” (as cited in Swales 2004: 63).
Swales (2004: 68) interpreted the genre-as-standard metaphor in terms of “conventional expectations”. Nevertheless, conventional expectations are not merely concerned with the language features of a genre.

The expectations of the users of a genre are also shaped by the adopted frame and by the participants’ uptake of it. For example, PDAs are used by patients, their families, and health professionals (cf. Section 4.2), how their expectations converge or diverge is complex (cf. Section 4.5).
2.2 Genre as metaphor

By using the genre of research grant proposals as examples, I enriched and developed Fishelov’s and Swales’ accounts into a cognitive pragmatic view of genre.

In that study I suggested the replacement of *genres as speech acts* with *genres as performance* and added one more metaphor (*genre as struggle*) (Tseng 2011).

- genre as families,
- genre as biological species,
- genre as institution,
- genre as speech acts,
- genre as frame,
- genre as language standard,
- genres as performance,
- genre as struggle
2.2 Genre as metaphor

Various types of struggles are exemplified in the writing of grant proposals:

- institutional type (e.g. to gain resources for one’s affiliation),
- interpersonal type (e.g. to meet the expectations of proposal reviewers and to gain recognition from reviewers, fellow researchers, colleagues, etc.),
- and personal type (e.g. to build and develop a research career) (Tseng 2011: 2261).
2.2 Genre as metaphor

In this study, I focus on *genre as struggle* because the metaphor well captures potential tensions arising from the emergence of genre (see Section 4).
2.2 Genre as metaphor

Because such struggles are not always detectable from the language of PDAs, instead of merely analyzing their linguistic features, I also examine the ideas and thoughts in the development process of designing PDAs written in Chinese.

By so doing, this study aims to contribute to a developing understanding of how genre is embedded within the cognition-society-pragmatics nexus.
Methodology
3.1 Data

The data of this study are originally written in traditional Chinese and are of two types.

The first type consists of PDAs written in Chinese. For the purpose of this study, six PDAs were collected from the sites of Taiwan-based hospitals. The selection is based on three criteria:

• featuring a variety of health topics,
• being available,
• and having an official status.

All the collected PDAs are either released or commissioned by Taiwan’s Ministry of Health and Welfare.
The second type consists of electronic files retrieved from the TMHW’s official sites committed to SMD or from hospitals’ online resources. They are PDF files containing PowerPoint documents originally used to assist the talks aimed at promoting SDM and introducing PDAs, and the speakers are policy makers representing the Joint Commission of Taiwan or health professionals from hospitals sharing their experience of designing and using PDAs.

In other words, this type of data was written by reviewers, developers, and writers of PDAs, thus providing empirical explanations for the features of PDAs written in Chinese.
These electronic files are used as open-access teaching materials for health professionals who would like to improve their knowledge of SDM.

These documents provide empirical evidence for the thoughts, considerations, and suggestions that underpin the development of PDAs in Taiwan.
3.1 Data

Criteria

There are two criteria for selecting the second type of data. Firstly, the information should concern any of the three aspects:

- **background** (e.g. what is SDM, how PDAs are used in other countries, and how SDM connects with PDAs),

- **features** (e.g. what distinguishes PDAs from other types of health communication, what structure they exhibit, what new functions they serve, what new interpersonal relationships are created or constructed)
and culture-specific considerations (e.g. why PDAs should be localized). Secondly, special attention is paid to information that expresses changes, differences, breakthroughs, and improvements related to the design and use of PDAs because these indicate potential tensions or problems that motivate the emergence of the genre.

Ten electronic files, from 2016 and 2017, were collected for this study. They are qualitatively justified for this study because they were written by policy makers and medical professionals participating in designing PDAs and promoting SDM in Taiwan, thus containing trains of thought behind the production of the genre.
3.2 Toward a cognitive-pragmatic, discourse analytical approach

Viewing genre as struggle is cognitive-pragmatic because the language use of genre is explained in relation to cognitive considerations:

• the adoption vis-à-vis resistance of a new thought (e.g. SDM) that motivates the design of a genre,
• knowledge gaps that are to be bridged between readers (e.g. patients) and writers (e.g. health providers and professionals),
• and the acceptance or rejection of a new genre (e.g. recognizing its value as opposed to not seeing its benefit).
3.2 Toward a cognitive-pragmatic, discourse analytical approach

This study elucidates five struggles pertaining to the cognitive processes involved in the emergence of PDAs.

More generally, the struggles connect with
- the mobilization,
- evaluation,
- extension,
- and/or contestation of complex knowledge of different types (e.g. medicine, health communication, and society).
The manifestation of struggles presumably has a different shape in each new genre. In order to elucidate various struggles inherent in the development of PDAs, I propose to approach such struggles from three perspectives or strata:

(i) the difficulties at practice level,
(ii) the changes exemplified in the emerging PDA discourse, and
(iii) the tensions between pragmatics, cognition and society.
3.2 Toward a cognitive-pragmatic, discourse analytical approach

Based on our knowledge of doctor-patient communication, the key stakeholders – patients, medical professionals, and health organizations – all face potential difficulties and challenges, some of which are listed in Table 1.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients and families</td>
<td>Lack of sufficient medical knowledge</td>
</tr>
<tr>
<td></td>
<td>Uncertainty regarding whether the medical advice from a given doctor best suits one’s condition</td>
</tr>
<tr>
<td></td>
<td>Not being fully informed of possible options and their risks</td>
</tr>
<tr>
<td></td>
<td>Not always fully understanding the doctor’s explanation in the clinical encounter</td>
</tr>
<tr>
<td>Medical professionals</td>
<td>Time constraint in communication to individual patients</td>
</tr>
<tr>
<td></td>
<td>Possible miscommunication with the patient (e.g. the risks of a treatment not clearly communicated)</td>
</tr>
<tr>
<td></td>
<td>Pressure of mistreatment accusations</td>
</tr>
<tr>
<td>Hospitals</td>
<td>The need to deal with medical disputes or lawsuits arising from the death or dissatisfaction of the patient</td>
</tr>
</tbody>
</table>

Table 1 The difficulties facing some of the key stakeholders in medical practice
3.2 Toward a cognitive-pragmatic, discourse analytical approach

These difficulties concern struggles with aspects
• of cognition (e.g. knowledge, uncertainty),
• of communication and language use (e.g. information and understanding),
• of social issues (e.g. medical mistreatment and disputes),
• and of their interactions.

As will be further elaborated, they affect a nexus of changes in the production of PDA discourse, which are embedded in tensions between cognition, pragmatics and society (see Section 5).
3.2 Toward a cognitive-pragmatic, discourse analytical approach

In order to provide a flexible method with which to further examine struggles at discourse level – changes anticipated to take place in the discourse of PDAs – I also adopt a heuristic view of discourse analysis proposed by Johnstone (2018).

According to her, discourse consists of six key elements:

- participants,
- medium,
- linguistic structure,
- purpose,
- prior discourse,
- and the world,

the last of which includes society and its conceptions of the world as exemplified in the discourse produced in it (Johnstone 2018).
Building on the six facets of discourse, I illustrate how the restructuring of these key discourse facets underpins the emergence of a new genre. More specifically, I identify five changes in the collected data (i.e., the differences and breakthroughs that PDAs are aimed at making), regarding them as subtle, less transparent struggles latent in the emergent genre of PDAs because to design PDAs in order to enact the target changes is no mean task.

As will be demonstrated, each of the five struggles involves the restructuring of at least one key facet of discourse and its interactions with one or more of the other elements.
Genre as struggle
Illustrated below are changes that the genre of PDAs is aimed at facilitating. Such changes attached to the emerging genre are characterized in terms of genre as struggle.

4.1 Struggle to provide more than health information: to restructure prior discourses and medium

4.2 Struggle to become more patient-centered, interactive and multi-directional than before: to reconnect participants

4.3 Struggle to develop a form: to redesign language and medium
4.1 Struggle to provide more than health information: to restructure prior discourses and medium

In 2015, the Joint Commission of Taiwan (JCT), in partnership with Taiwan’s Ministry of Health and Welfare, launched a project aimed at promoting SDM and collecting feedback about SDM from health professionals and patients (Liao et al. 2017).

- Examples (1) introduced the project and its results (e.g. the production of 47 videos showcasing the implementation of SDM).
- Example (2), a comment on the project, pointed out a lack of tools that assisted in making clinical decisions.

4.1 Struggle to provide more than health information: to restructure prior discourses and medium

104年醫病共享決策試辦方案(104.8.27~12.31)
– 設定11個主題，共19家機構提供47部影音工具。
– 共34家機構參與試辦方案(12家醫學中心、22家區域醫院)。
  • 以問卷形式蒐集醫師及病人或家屬對參與本試辦方案的看法...

2015 Shared Decision Making Program (27 Aug ~ 31 Dec 2015)

• 11 health themes were used and 19 agencies provided 47 audio-visual tools
• 34 agencies participated in the pilot program (12 medical centers and 22 regional hospitals)
• it collected the views of physicians and patients or their families in the form of questionnaires on their participation in the program… (Liao 2016)

All the cited examples are translated into English by the author.
4.1 Struggle to provide more than health information: to restructure prior discourses and medium

Review of the 2015 SDM program

- The participating hospitals provided mainly videos that featured post-decision making health education, with a relative lack of PDAs for clinical use.

(Wu 2016)
4.1 Struggle to provide more than health information: to restructure prior discourses and medium

In the collected data, SDM is introduced and compared with health education as (3) demonstrates.

SDM differs from health education in that it:

1. clearly identifies a clinical problem that requires a decision to be made;
2. has specific procedures; and
3. informs the patient of the benefit and side effect of a treatment option (in terms of statistics or percentage). (Hua 2017)
**SDM** is implemented through a series of talks between medical professionals and patients. Based on the thought of SDM, PDAs are intended to facilitate the practice of SDM. They are tools used to expedite SDM. The thought of SDM inevitably is infused in the production of PDAs. A PDA is written for a specific health problem that requires a treatment decision rather than for the general public, who do not necessarily have to make a treatment decision. In order for a decision to be made, the way information is delivered in it follows a specific set of procedures. Specific medical knowledge (e.g. risk and benefit of each option) is also required in the PDA in order to assist the patient in decision making.
PDA is a genre connected to or in a dialogic relationship with other genres of health communication, e.g. medical consultations, primary care conversations between doctors and patients, consents for treatments, and articles introducing diseases to the public. It is neither completely isolated from them nor exactly the same because it is used in a different temporal setting (i.e. when it is necessary to make a medical decision) and the given information is not simply for the patient to read and understand but to elicit the patient’s preference and lead to a decision out of a list of potential treatment options as (4) points out.
4.1 Struggle to provide more than health information: to restructure prior discourses and medium

SDM contains the spirit of informed consent and health education but differs from them in its time point of communication, offer of more options, and showing more respect for the patient’s consideration and preferences. (Liao 2017a)
The comments made in (3) and (4) suggest that a set of complex and related knowledge is attached to a genre family and that a new way of thinking in medical practice shapes and encourages the emergence of a genre.

The production of a PDA requires the writer to evaluate what medical information is necessary in making a medical decision, whether it is unbiased and updated, and what questions should be asked of the patient.

These concerns do not merely involve providing health information but require the PDA writer to develop metapragmatic awareness – a cognitive mechanism that filters information out of an array of socio-institutional considerations.
This can be a difficult task to medical professionals who have no experience in producing PDAs, hence a struggle.

The struggle is exemplified in the writing of PDAs as they reshape prior discourses associated with health communications such as public health education, medical consultations, informed consent, and doctor-patient dialogues.

PDAs do not seek to replace any of these, but to restructure them in such a way that the new genre seems to encompass a trace of each of them but differ from them in that it contains only key information necessary for the patient to make a treatment decision.
At the same time, PDAs, in several ways, also reshape the *medium* of health communication leading to making medical decisions.

**For example**, face-to-face consultations and dialogues that would have been conducted in spoken mode in a series of clinical encounters are now turned into a written document which awaits the patient to fill in the requested information (see Section 4.3 for more details).
Furthermore, although represented mainly as a written text, the PDA also facilitates a series of subsequent talks between the patient and his/her family, and between the patient and the health provider (see Section 4.2), thus serving as a solid basis for talks and discussions among the key stakeholders. The shifts in medium accompany the struggle to select and represent the medical information.
4.2 Struggle to become more patient-centered, interactive and multi-directional than before: to reconnect participants

SDM is a reaction against the paternalistic model, in which health professionals make decisions for patients and patients rely fully on health professionals (Coulter 1999). It also differs from the informed decision-making model, in which the physician informs the patient of technical knowledge regarding his/her health condition but leaves decision making to the latter (Emanuel and Emanuel 1992: 2225).
As (5) suggests, SDM is aimed at being individualized (tailor-made) and interactive and multi-directional, thus distinguishing itself from the previous models of medical communication.

Shared Decision Making is characterized as being multi-directional and individualized with the patient’s value considered. (Hsieh 2016)

Example (5) in its source text is accompanied by five pictures representing patient, family, pharmacist, doctor, and other healthcare providers. “Multi-directionality” here means communication taking place not merely from the doctor to the patient, but also from the patient to the doctor, between the patient and his family, and between the patient and other healthcare providers such as nurses and pharmacists.
Example (6) is cited from a PDA concerning treatment options for women with menopause.

It consists of

- the health provider’s supplying information (6.1–6.2)
- and asking questions in a patient-centered way (6.3),
- the patient’s answering them (6.4–6.5),
- the health provider’s checking the patient’s knowledge about a health issue (6.6–6.10)
- and eliciting his/her decision (6.11),

Furthermore, of particular interest is the representation of the patient in the form of the first-person person *I* (e.g. 6.3, 6.6, 6.10, 6.12) as it is a linguistic manifestation of a patient-centered perspective (cf. Table 2).
The Treatment Option of Not Using Hormone Supplements (6.1)
The other methods [than using hormone] to relieve some of your symptoms include, for example, following the Mediterranean diet, doing regular exercise, learning qigong [a Chinese exercise involving slow bodily movement and deep rhythmic breathing], receiving acupuncture and herbal treatment, not smoking, and reducing intake of caffeine and alcohol …etc. (6.2) …
4.2 Struggle to become more patient-centered, interactive and multi-directional than before: to reconnect participants

The option I wish to choose at the moment is (6.3)
□ Hormone replacement therapy (6.4)
□ No use of hormone therapy (6.5)

…

Step 3: How much do I know about the medical options? (6.6)

<table>
<thead>
<tr>
<th>Question</th>
<th>Please tick the appropriate box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without supplementing hormones, other methods can also fully improve the symptoms of menopause. (6.7)</td>
<td>□ Yes (6.8) □ No (6.9) □ I do not know (6.10)</td>
</tr>
</tbody>
</table>
4.2 Struggle to become more patient-centered, interactive and multi-directional than before: to reconnect participants

Step 4: Sure about the medical treatment by now? (6.11)

I have decided. □ To use a hormone therapy (6.13)
(6.12)
□ Not to use hormones, but try to change lifestyle (6.14)

I still cannot decide. (6.15)
□ I want to discuss my decision with my attending physician again (6.16)
□ I want to discuss my decision with other people (including my spouse, family, friends) (6.17)
4.2 Struggle to become more patient-centered, interactive and multi-directional than before: to reconnect participants

In case of a PDA for a serious health problem (e.g. respiratory failure, dementia), the information is structured like a dialogue between the doctor and the patient’s family member as (7) illustrates.

When a family member of yours has respiratory failure, s/he needs to have an endotracheal tube inserted to maintain effective breathing.

Using a PDA is not intended to replace a series of clinical encounters between the patient and his close family/friends. Instead, the tool helps generate such talks in the processes of understanding the PDA, completing the questions in it, and making a joint decision (see Example (8)).

Example (8) outlines how PDAs are used in the medical practice of SDM at a Taiwanese hospital. It follows a three-step model proposed by Elwyn et al. (2012: 1363):

- **choice talk** (“making sure that patients know that reasonable options are available”,
- **option talk** (“providing more detailed information about options” and eliciting patients’ options),
- **decision talk** (“supporting the work of considering preferences and deciding what is best”).
4.2 Struggle to become more patient-centered, interactive and multi-directional than before: to reconnect participants

A Flowchart of the Clinical Implementation of PDAs

- **Choice Talk**
  - "Chief doctor"
- **Option Talk**
  - "Coach"
- **Decision Talk**
  - "Chief doctor"

- "to use the PDA as a way of explaining to patients the health problem, treatment scheme, and possible options"
- "to introduce the patient to a PDA coach"
- "to talk to the patient face-to-face about all the treatment options"
- "to provide the patient with written documents to read at home"
- "to understand the patient’s treatment preference"
- "to analyze the pros and cons of each treatment option"
- "to support the patient’s decision based on his/her personal values"

(Lee, K-Y 2017)
As (8) shows, by using relevant PDAs, chief physicians explain to patients information about health issues and possible treatments and then introduce coaches (e.g. nurses, pharmacists, social workers) to patients. The assigned health professionals then guide the patients through the used PDAs, and the patients take time reading the given PDAs and filling in their answers at home.

Finally, after the patients complete the PDA and when they return to hospital, chief physicians check if the patients’ understanding is correct, identify the patients’ preferences and concerns, explain the pros and cons of the options, and make a joint decision with each of the patients.
The use of a PDA, together with the series of PDA-supported talks, inevitably reconnects the patient’s relationships with other participants such as families and health providers. An ambience of providing support is created in the process rather than leaving the patient feeling burdened with the pressure of making a decision on her/his own. When writing a PDA, the medical professional not merely selects and provides appropriate health information from his/her view but also writes for the patient, making deliberation patient-friendly. This is a struggle in that the genre is expected to change the landscape of doctor-patient communication.
4.3 Struggle to develop a form: to redesign language and medium

A PDA embodies a knowledge base that offers patients information required to make treatment or test decisions. At the same time, it asks the patient questions, thereby eliciting information and making the completed PDA form individualized and serving as a basis for the subsequent doctor-patient talk where a medical decision is to be confirmed. The needed knowledge and the elicited information are important, as they represent the ways such knowledge is delivered and the information is gained.
4.3 Struggle to develop a form: to redesign language and medium

The JCT proposed in 2016 that a PDA contained six parts:
• theme,
• target audiences,
• description of the health problem,
• treatment options explained,
• an invitation to elicit the patient’s initial preference, steps that help the patient with decision making (Wu 2016).

In 2017 they have been modified and expanded to eight parts, including the additional two parts:
• foreword and
• information about websites where further information is available.

Apart from the theme/title, most of the PDAs released by the Health Promotion Administration, Ministry of Health and Wealth, have eight parts (see i–viii in Table 1). Some changes made in the development process are highlighted in Table 2.
### 4.3 Struggle to develop a form: to redesign language and medium

Table 2 Structural changes in PDAs written in Chinese from 2016 to 2017

<table>
<thead>
<tr>
<th>No.</th>
<th>Sections Suggested in 2016 PDA Contest</th>
<th>Section Suggested in 2017 PDA Contest</th>
<th>Sections or Wording Used in Officially Released PDAs in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>主題 (Theme)</td>
<td>決策題目 (Decision Topic)</td>
<td>[actual title, e.g. Should I take hormone treatment for the menopause?]</td>
</tr>
<tr>
<td>ii</td>
<td>前言 (Foreword)</td>
<td>前言 (Foreword)</td>
<td>前言 (Foreword)</td>
</tr>
<tr>
<td>iii</td>
<td>適用對象/適用狀況 (Target audience/ Applicable medical condition)</td>
<td>適用對象/適用狀況 (Target audience/ Applicable medical condition)</td>
<td>適用對象 (Target audience)</td>
</tr>
<tr>
<td>iv</td>
<td>疾病介紹 (Introduction to the disease)</td>
<td>疾病或健康議題簡介 (Introduction to the disease or health issue)</td>
<td>疾病或健康議題簡介 (Introduction to the disease or health issue)</td>
</tr>
<tr>
<td>v</td>
<td>治療方式介紹 (Introduction to treatment options)</td>
<td>醫療選項簡介 (Introduction to medical options)</td>
<td>醫療選項簡介 (Introduction to medical options)</td>
</tr>
<tr>
<td>vi</td>
<td>您想要選擇的方式是 (The option you wish to choose is____)</td>
<td>您目前比較想要選擇的方式是 (The option you wish to choose at the moment is____)</td>
<td>我目前比較想要選擇的方式是 (The option I wish to choose at the moment is____)</td>
</tr>
<tr>
<td>vii</td>
<td>請透過以下四個步驟來幫助您做決定 (Please use the following four steps to help you with decision making)</td>
<td>請透過以下四個步驟來幫助您做決定 (Please use the following four steps to help you with decision making)</td>
<td>透過以下四個步驟來幫助我做決定 (Use the following four steps to help me with decision making)</td>
</tr>
<tr>
<td>viii</td>
<td>瞭解更多資訊及資源 (For more information and resources)</td>
<td>瞭解更多資訊及資源 (For more information and resources)</td>
<td>瞭解更多資訊及資源 (For more information and resources)</td>
</tr>
<tr>
<td>ix</td>
<td></td>
<td></td>
<td>參考文獻 (References)</td>
</tr>
</tbody>
</table>
Example (9) briefly states the principles that apply to the form and content of PDAs.

PDAs are produced in structured form, mainly utilizing diagrammatic information. To ensure the correctness of the content and to allow patients to make informed choices, they should be evidence-based, informative with quantitative data [e.g. risk rates] and accessible to the majority, and they can also be paired with flat leaflets, graphic cards, audio-video aids or interactive web pages to help patients understand the content of the communication.
PDAs are to assist in spoken clinical encounters. Compared with clinical encounters, which mainly rely on spoken communication, this genre indeed makes a few differences.

- To begin with, a completed written genre constitutes a permanent record.
- Secondly, a written document serves as a stable source of information that the patient can reread and consult, thus providing information without time constraints and reducing the possibility of misunderstanding.
- Thirdly, those patients shy of expressing their views may feel more at ease doing it by writing and by ticking the appropriate box.
- Fourthly, because PDAs also use diagrams, pictographs or other visual information, they assist in delivering information.
4.3 Struggle to develop a form: to redesign language and medium

The institutional force in standardizing the structure of the emergent genre also plays a key role in developing a typified structure of PDA written in Chinese. For example, as (10) shows, in the part of the PDA regarding the trade-offs of the pros and cons of each option, the JCT specifies four steps (cf. vii in Table 2; see also 6.6–6.17) followed by the patient’s decision with a particular option.

The following four steps help you with decision making

**Step 1**: A comparison of options

**Step 2**: What do you care about when making a medical decision? To what extent do you care about them?

**Step 3**: Have you understood the health information provided?

**Step 4**: Have you made a treatment decision?

請透過以下四個步驟來幫助您做決定

步驟一：選項的比較。

步驟二：您選擇醫療方式會在意的項目有什麼?以及在意的程度為何？

步驟三：對於上面提供的資訊，您是否已經了解呢？

步驟四：您現在確認好醫療方式了嗎？
4.3 Struggle to develop a form: to redesign language and medium

Example (11) was a comment by the JCT’s Deputy Executive Officer on unacceptable PDAs submitted to the past PDA contests held by the organization.

審查未通過常見原因：
- 直接翻譯國外作品，未因應國內適用性調整或修訂!

Some submitted PDAs were not approved because - they were directly translated from PDAs originally used abroad [i.e., written in English], but no revision or adaptation was made based on domestic situations.

(Liao 2017a)
Example (12) states three areas which PDA policy makers in Taiwan were working on in 2017. It shows that the effort was being made to render PDAs suited to local situations rather than treating them as tools that can be directly translated without any adaptation.

4.3 Struggle to develop a form: to redesign language and medium

Research and Development of PDAs
• development of localized evaluation standards and two-phase verification methods (tried on laypeople and checked by medical professionals)
• revision of the model of PDAs based on international PDA standards and formats
• enhanced ways in which laypeople take part in the development process

(Liao 2017a)
Clarifying the evaluation criteria serves as a guideline for the development of PDAs. The criteria are based on the checklist for International Patient Decision Aid Standards (IPDAS), which comprises three parts:

- content,
- development process,
- and effectiveness,

each of which has a long list of requirements.

The localized version has restructured the three parts into four: content of PDA, methods of helping patients understand the content, development process, and overall performance, the first, third and the fourth of which correspond with the three main parts of the IPADS’s checklist.
Example (13), cited from a PDA, contains information specifically pertinent to the local situation. Such information is based on studies that drew on Taiwanese data or involved Taiwanese patients. Medical terms (e.g. hemodialysis) may be accompanied by locally known expressions (e.g. *xixie*洗血 “cleaning blood”).

Kidney Transplantations in Taiwan

There are currently more than 7,000 people waiting for kidney transplantations. Among them per year are nearly 200 who are recipients of brain-dead organ donors, and about 100 who receive living donor kidney transplants. As of 2014, the proportion of kidney transplants to dialysis was about 4:100. (PDA, “As an end-stage renal disease patient, which treatment should I choose?”)

The production of PDAs is adapted to the world, society and culture where they are intended to be used. The emergence of PDAs also shapes the *world*.

**For example**, the genre is also aimed at improving medical culture and doctor-patient relationships, thus changing medical practices in an even more positive light. As such, the genre embodies a struggle to adapt the conventions of English-mediated PDAs to the context of Taiwan and even to change its medical culture still characterized by a paternalistic model and insufficient participation in SDM (see (14)).
4.3 Struggle to develop a form: to redesign language and medium

The use of PDAs makes it necessary for patients and their family members to express their likes and dislikes concerning each option. Implementing PDA-mediated SDM in the long run helps reduce the medical practices of the paternalistic model and the informed decision-making model, thus changing medical culture.

More work regarding the patient’s participation in the SDM culture is required:

...  
- the patient’s proactive attitude to participating in SDM remains to be encouraged, and paternalistic medical culture is yet to be re-addressed  
- the patient is still somewhat unaccustomed to speaking up his/her own ideas, although the use of ticking options in the PDA can help in this respect  

(Liao 2017a)
Tensions between pragmatics, society, and cognition
The above five struggles roughly correspond with five principles for genre theory proposed by Berkenkotter & Huckin (1993), with some modification of the latter. The struggle to provide more than health information matches the principle that genre knowledge is “embedded in our participation in the communicative activities of daily and professional life” and “is [thus] a form of ‘situated cognition’ (Brown, Collins, & Duguid, 1989)” (Berkenkotter & Huckin 1993: 482).
5. Tensions between pragmatics, society, and cognition

Associating emerging genres with the general principles for genre theory, Table 3 outlines the connections, suggesting that the discourse facets being re-operationalized and the principles of genre shed light on each other. While the struggles go with the actions of the key discourse facets, as illustrated in Section 4, such actions also shape and are shaped by the principles that characterize genre.

<table>
<thead>
<tr>
<th>Actions of Discourse Facets</th>
<th>Principles for Genre Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>To restructure prior discourses &amp; medium</td>
<td>Genre knowledge as situated cognition</td>
</tr>
<tr>
<td>To reconnect participants</td>
<td>⟨→⟩</td>
</tr>
<tr>
<td>To redesign language &amp; medium</td>
<td>(Newly established) social structures</td>
</tr>
<tr>
<td>To readapt to the world</td>
<td>⟨→⟩</td>
</tr>
<tr>
<td>To reset purpose</td>
<td>Dynamic (new) form</td>
</tr>
<tr>
<td></td>
<td>⟨→⟩</td>
</tr>
<tr>
<td></td>
<td>Signaling a discourse community (and connecting with discourse communities that have a shared value)</td>
</tr>
<tr>
<td></td>
<td>⟨→⟩</td>
</tr>
<tr>
<td></td>
<td>Rhetorical appropriateness</td>
</tr>
</tbody>
</table>

Table 3 Connections between key discourse facets and principles for genre theory.
The awareness also consists of understanding the needed knowledge as far as the patient is concerned. Enumerated in Table 4 are the cognitive factors both guiding the production of PDAs and embedded within the genre.

Table 4 The cognitive factors involved in producing PDAs

<table>
<thead>
<tr>
<th>Knowledge based on medical evidence and essential to making specific medical decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness that the patient’s preference should be elicited and respected and that the provided treatment options should be represented in an unbiased manner (i.e., a balanced account of the pros and cons of each option with no hint of the medical professional’s personal preference)</td>
</tr>
</tbody>
</table>

Knowledge accessible to laypeople

<table>
<thead>
<tr>
<th>Awareness of localized criteria for evaluating PDAs and of International Patient Decision Aid Standards (IPDAS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness that the patient’s decision is to be made based on his/her understanding of the provided medical information</td>
</tr>
</tbody>
</table>
Conclusion
Drawing on the suggestions made by policy makers and developers of PDAs and on Chinese-language PDAs, this study contributes to an empirical understanding of the emerging genre by elucidating how it exemplifies GENRE AS STRUGGLE. It has illustrated five struggles that characterize changes or breakthroughs that PDAs are anticipated to make.
6. Conclusion

On the one hand, these struggles roughly correspond with the general principles for genre theory, with some modification of the latter.

On the other hand, in contrast to many studies of emerging genres motivated by new media, this study suggests that while mainly motivated by SDM, a new concept in making treatment decisions, the emergence of PDAs involves restructuring, reshaping and redesigning the key discourse facets such as prior discourse, participants, language, medium, the world, and purpose.