1. INTRODUCTION

The need for mieru arises from an early stage of language instruction. To describe what one sees in an image, or to give someone directions to a place, mieru is essential. In a Japanese classroom, however, it is not uncommon to see a student confused between mi-ru and mieru. Take the following example of my students work:

1) 私は白鳥を見ます。Watashi wa hakuchoo o mimasu.
   [lit.] “I will look at a swan.”
The student was puzzled when I explained that it would be more natural to say:

2) 白鳥が見えます。Hakuchoo ga miemasu.
   [lit.] “A swan is visible.”

The unnatural sentence (1) reflects the fact that see is the closest English lexical equivalent to mieru. However, the two differ in important ways: Syntactically, see requires the experiencer of the seeing to be expressed, whereas mieru requires only the entity seen (the semantic object) to be expressed. In other words, semantically, the English sentences describe the event of perceiving, while the Japanese sentences describe the content of the perception. Another confusion in this student’s work is the grammatical aspect. Mimasu in (1) is a non-stative activity verb just like watch and look at in English, so its non-past form cannot refer to a literal present form. (Hence the literal translation “I will look at a swan.”) To refer to a literal present meaning, that you are seeing a swan, a stative verb mieru is more appropriate.

Thus, teaching just the vocabulary term simply does not suffice. However, in today’s textbooks there is no to little explanation as to how to construct a sentence with mieru, and in what context it can or cannot be used.

There have been many studies done on the verb mieru, often in comparison with mi-rareru (a derivative form of miru). Previous studies show inconsistencies in the way they describe the morphology, syntax and semantics of mieru. For one, the analysis treating ga as an object marker (Yamauchi and Shimizu 2001, Yamaoka 2000) may seem to contrast with ones that treat mieru as an intransitive verb with a subject marked by ga (e.g. Jacobsen 1992, 2016; among others). Kuno (1973) asserts that mieru can create ambiguous or “elliptical” sentences because: i) the sentence can be intransitive, representing objective attributes of the subject; and ii) the sentence also can be transitive, with the speaker as the understood subject, expressing a subjective mental process of the speaker toward the object. Yamaoka (2000), too, sees an understood or semantically “latent” (潜在化 senzaika) subject in the deep structure of mieru sentences. Araki (1980), Suga and Hayatsu (1995), and Toyota (2011) advocate applying the concept of middle voice (中間態 chuukantai, 中相 chusoo) to the analysis of verbs like mieru. They categorize yu-ending verbs in classical Japanese, such as 見ゆ miyu (see) and 聞ゆ
kikoyu (hear), as 中相動詞 chuusoo dooshi (middle verbs) or 自発動詞 jihatsu dooshi (spontaneous verbs).

In this study, to seek a clearer understanding of the meaning and uses of mieru and to discuss pedagogical implications, I extracted more than 2,000 samples from the Shonagon online corpus and examined the ambiguous relationship between mieru and the noun marked by the case marker ga, its shared functional load with mi-rareru as a verb of visual perception, and the possibility of its interchangeability with mi-rareru.

2. DISCUSSION

The collected data from the Shonagon corpus shows cases of mieru and mi-rareru being interchangeable, and cases where only one of them is acceptable. Below are examples where the two verbs can be more or less treated as synonyms.

2. a. Cases where mieru and mi-rareru are structurally identical

3) 蓋をとると中身が見える/見られる。
   Futa o toru to nakami ga mieru/mirareru.
   If you remove the lid, you can see the inside.

4) 部屋からは渓谷と紅葉も見える/見られるそうだ。
   Heya kara wa keikoku to kooyoo mo mieru/mirareru sooda.
   They say that from the room the gorge and fall colors can be seen.

5) 娘の晴れ姿が見えた/見られた。
   Musume no haresugata ga mieta/mirareta.
   I got to see my daughter in her wedding dress.

In (3)-(5), the verbs assume potential function, but note that (5) has slightly different connotations: Mieru implies that the speaker glanced at the bride by chance, while mi-rareru suggests he witnessed the moment intentionally.

Comparing those against the following:

6) 彼女はいつも生意気に見える/見られる。
   Kanojo wa itsumo namaiki ni mieru/mirareru.
   She always looks sassy. / She is always seen as sassy.

Notice that in (6) the sentence remains grammatical when the verbs are interchanged but it produces completely different meanings, hinting at some difference in the deep structure. Mi-rareru here indicates passive meaning.

An analysis of the corpus also sheds light on certain restrictions that cause one verb to be preferred over the other. Below, I will list them according to the type of restrictions.

2. b. Particles

7) ペンギンがすぐそばで?見える/見られる。
   Pengin ga sugu soba de *mieru/mirareru.
   You can see the penguins up close.

8) ペンギンがすぐそばに見える/*見られる。
   Pengin ga sugu soba ni mieru/*mirareru.
   The penguins appear to be very close.

9) 果実が目で*見える/見られるほどの大きさになった
Kajitsu ga me de *mieru/ mirareru hodo no ookisa ni natta
The fruit has grown big enough to be seen.

10) 果実が目に見える／見られるほどの大きさになった。

Kajitsu ga me ni mieru/ *mirareru hodo no ookisa ni natta
The fruit has grown big enough to be seen.

In these sentences, a difference in the use of particles helps determine the direction of perception. The で de in (7) is locative, which indicates a location of perceiving (the location of an action by the experiencer) while that in (9) indicates a means or tool of perceiving. The focus here is how the speaker, who is intent on seeing the objects, should go about to make the event of seeing possible. The に ni in (8) indicates the location of the semantic object being perceived, and that in (10) indicates a goal where the vision reaches the human organ of perception, namely the eyes. In sum, に見える ni mieru expresses how the semantic object is perceived, and で見られる de mirareru indicates how the intended act of perceiving is possible.

These differences in co-occurring particles show that mieru is spontaneous in the sense that the visual image perceived comes to one’s eyes. Mi-rareru here is potential in the sense that the intended act of perceiving is possible through the use of a particular instrument or method (i.e. naked eye in this case) or from a particular location where the speaker may choose to be.

2.c. Level of Volition
Volition seems to play an important role in determining the distribution of mieru and mi-rareru. Nouns such as 動画 dooga (video), 映画 eiga (movie), 番組 bangumi (TV program) and 情報 joohoo (information), all of which require the active volition of the experiencer to perceive visually, rejects mieru.

11) 携帯電話で動画も*見える／見られる。
Koitaidenwa de dooga mo *mieru/mirareru.
You can even watch videos on your mobile phone.

12) どうしたらあの番組がもう一度*見える／見られるでしょうか。
Dooshitara ano bangumi ga mooichido *mieru/mirareru deshoo ka.
How can I watch the TV program again?

13) ウェブサイトで詳しい情報が*見える／見られる。
Uebusaito de kuwashii joohoo ga *mieru/mirareru.
You can see detailed information on the website.

These examples provide strong evidence that when there is volition present in the sense of ‘watch’ or ‘look for’ (rather than just ‘see’), mieru may not be used.

2.d. Prediction, rational thinking and judgement
Another case when mieru cannot be used is when the predicate contains evidence of one’s rational thinking or judgement, especially regarding an unrealized situation. Here are some examples:

14) 公的助成のための支出は年間一億円程度と*見える／見られる。
Kootekijosei no tame no sishutsu wa nenkan issen’oku-en teido to *mieru/mirareu.
The yearly expense for public subsidies appears to be approximately a trillion yen.

15) 気温は引き続き上昇すると*見える／見られる。

These differences in co-occurring particles show that mieru is spontaneous in the sense that the visual image perceived comes to one’s eyes. Mi-rareru here is potential in the sense that the intended act of perceiving is possible through the use of a particular instrument or method (i.e. naked eye in this case) or from a particular location where the speaker may choose to be.
Kion wa hikitsuzuki jooshoo suru to *mieru/mirareru.
They predict that the temperature will continue to rise.

16) 選挙後は与党と野党が入れ替わると*見える/見られる。
Senkyo go wa yotoo to yatoo ga irekawaru to *mieru/mirareru.
It is predicted that the majority and the minority seats will switch.

In (14)-(16), mi-rareru can be replaced with kangae-rareru and omow-areru, which represent thinking, reasoning and judgement.

I would further argue that the following words and syntactic patterns cause mieru to be ungrammatical:
• numerical values: 〜円 en (yen), 〜ドル doru (dollar) etc.
• verbs of future trend: なる naru (become), 及ぶ oyobu (reach), 上昇/下落する jooshoo/geraku suru (go up/drop), 増える/減る fueru/heru (increase/decrease) etc.
• question particle KA: Sentence+か ka, Sentence+ないか nai ka
• dependent noun: 目安 meyasu (standard), 影響 eikyoo (influence), 時点 jiten (point of time) etc.

2.e. Abstraction
The nature of the noun co-occurring as a semantic object is another restricting factor. Mieru cannot occur with nouns that represent abstract concepts, particularly when they entail grammatical aspect (see the arrows below) such as 傾向 keikoo (trend), 増加 zooka (increase), 減少 genshoo (decrease), 連続 renzoku (sequence), 典型 tenkei (prototype), ケース keesu (case/instance), 劣化 rekka (deterioration), and 成果 seika (accomplishment).

17) 地球温暖化の傾向が*見える/見られる。
Chikyuu ondanka no keikoo ga *mieru/mirareru.
A trend in global warming can be seen.

18) 首相会談中、日中関係に進展が*見えた/見られた。
Shushoo kaidan chuu, nicchuu kankei ni shinten ga *mieta/mirareta.
During the meeting of top officials, progress was seen in the Japan-China relationship.

19) 運動会では日頃の練習の成果が*見えた/見られた。
Undookai dewa higoro no renshuu no seika ga *mieta/mirareta.
His/her diligent efforts appear to have paid off at the Sports Day event.

In other words, mieru tends to prefer concrete objects that are visible to human eyes, and actions that occur at a point in time (as opposed to over a course of time).
2.f. Adverbial restrictions

There appears to be a correlation between the type of adverb and the distribution of *mieru* and *mi-rareru*. An analysis of the corpus shows that when the adverb represents a state of visibility, such as くっきり *kukkiri*, うっすら *ussua*, ぼんやり *bon’yari* (faintly), and 一見 *ikken* (at a glance), only *mieru* can occur. On the other hand, when the adverb indicates a state of attentive gazing, such as まじまじと *majimaji-to* and じろじろと *jirojiro-to* (intensely), the counterpart *mi-rareru* becomes grammatical and takes on a passive meaning. In the middle of the spectrum are adverbs that indicate a partial or incomplete viewing, including ちらっと *chiratto* (at glance) and 転々と *tenten-to* (scattered). These can take either verb, assuming a potential interpretation. See the following diagram (Table 1) with examples.

Table 1:

<table>
<thead>
<tr>
<th>State of Visibility</th>
<th>Partial/Incomplete View</th>
<th>State of Attentive Gazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>くっきり</td>
<td>ちらほら</td>
<td>じっと</td>
</tr>
<tr>
<td>ポツンと</td>
<td>点々と</td>
<td>まじまじと</td>
</tr>
<tr>
<td>ぼんやり</td>
<td>ちらっと</td>
<td></td>
</tr>
<tr>
<td>うっすら</td>
<td></td>
<td></td>
</tr>
<tr>
<td>一見</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20) 霧の向こうにぼんやり富士山が見える/見られる。
*Kiri no mukoo ni bon’yari Fujisan ga mieru/*mirareru.*
Through the fog, Mt. Fuji is vaguely visible.

21) 早咲きの桜がちらほら見える/見られる。
*Hayazaki no sakura ga chirahora mieru/mirareru.*
Early blooming cherry blossoms can be seen here and there.

22) じっと*見える/見られると、恥ずかしい。
*Jitto* *mieru/mirareru* to, hazukashii.
I feel uncomfortable if I am stared at.

2.f. TE form

On the corpus data, there were a number of constructions in the form TE *mieru/mi-rareru*. To examine these more thoroughly, I collected a further 1,000 pieces of data of TE-*mieru* from the online corpus and examined these to see if they could be replaced with TE *mi-rareru*. Based on what I found, the following observations can be made:

- **TE-*mieru*** expresses a spontaneous meaning. That is, the entity’s state, whether or not it is realized as true, comes to one’s awareness without the influence of any external force.
- **TE-*mi-rareru*** tends to express the passive, acceptable only if the semantic object being perceived is human.
23) ほほがこけて、以前より老けて見える／見られる。

_Hoho ga kokete, izen yori fukete mieru/mirareru._

Her cheeks have sunken and she looks older than before.

24) こういう時代に謙遜の必要性を説くのは時代に逆行して見える／見られるかもしれません。

_Kooiu jidai ni kenson no hitsuyoo-sei o tokuno wa jidai ni gyakkooshite mieru/mirareru kamoshirenai._

It might look like going back in time (for me) to discuss the importance of humility considering the age we live in. / I might be seen to be going back in time by discussing importance of humility considering the age we live in.

25) 球が宙に浮いて見える／見られる。

_Tamaga chuuni uite mieru/*mirareru._

The ball looks like it is floating in the air. / *The ball is seen to be floating in the air.

26) 春の海は黄金色に輝いて見える／見られる。

_Haru no umi wa koganeiro ni kagayaite mieru/*mirareru._

The spring ocean appears to shine in a golden color. / *The spring ocean is seen shining in golden color.

More data collection and examination are needed to determine the nature of verbs which can/cannot be combined with TE-_mieru_ and TE-_mi-rareru._

2.g. Interjections

An interjection is an utterance of exclamation. The occurrence of surprise is a spontaneous event and by no means one brought about by human volition. It is noteworthy that only _mieru_ remains grammatical when an interjection is present in the sentence.

27) ほら、見て。天の川が見える／見られる。

_Hora, mite. Amanogawa ga mieru/*mirareru._

Look, there is the Milky Way.

28) あ、富士山が見えたよ／見られたよ。

_A, Fujisan ga mieta/*mirareta yo._

Oh, there is Mt. Fuji.

2.h. Idiomatic Expressions

I came upon a few idiomatic expressions on the corpus and here are some examples.

29) 手術をして目が見える／見られるようになった。

_Shujutsu o shite me ga mieru/*mirareru yooni natta._

I am able to see (better) after the eye surgery.

30) 日本は目に見えて／見られて主要な脅威となった。

_Nihon wa me ni miete/*mirarete shuyoona kyooi to natta._

Japan has become a manifest major threat.

31) 彼は女装しても見える／見られるね。

_Kare wa josoo shitemo *mieru/mirareru nee._

He looks nice even when he is dressed like a woman.
Note that the *ga*-marked noun (目, ‘eye’) in (27) is not a semantic object (an entity being perceived) but an organ in the human optical system that perceives.

Idiomatic expressions are set constructions that seem to have less flexibility in allowing variation, and therefore the possibility for interchangeability between the two verbs diminishes. These idiomatic meanings are lost if the verbs are interchanged from *mieru* to *mi-rareru*, and *mi-rareru* to *mieru*, and therefore the altered sentences are ungrammatical.

3. CONCLUSION

Through examining the distribution of *mieru* and *mi-rareu*, it seems possible to say that they share much of the same semantic space of potential meaning and they are often interchangeable in this meaning. However, the interchangeability can be affected by the level of volitional effort of the experiencer. Assuming a spectrum of “Spontaneous – Potential – Passive” as diagramed in Table 2, both *mieru* and *mi-rareu* would start from the middle (the semantic space of potential meaning), and *mieru* would extend toward the semantic space of spontaneous, and *mi-rareu* toward the semantic space of passive. The spectrum shows that the greater the amount of volition or the amount of external force involved, the more acceptable *mi-rareu* becomes. The less, the more acceptable *mieru* becomes. The overall distribution remains the same when a verb in the TE form precedes these verbs.

The study has also found that *Mieru* prefers tangible or concrete entities, spontaneous occurrences, and conjectures based on directly perceivable situations as its semantic object. *Mi-rareu*, on the other hand, tolerates more abstract concepts as its semantic object, unrealized situations, and conjectures as a result of logical thinking.

Grammaticality with certain adverbs also provides a clue to the difference in meaning: *Mieru* expresses a state of visible perception, while *mi-rareu* implies attentiveness or volitional effort in looking at/watching.

Table 2:

<table>
<thead>
<tr>
<th>Volition</th>
<th>External Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>見える (mieru)</td>
<td>見られる (mi-rareu)</td>
</tr>
</tbody>
</table>

Spontaneous      Potential                Passive

All that said, linguistic training on judging passive, potential, or spontaneous meaning should not be the primary goal in teaching Japanese. What do students need to learn, or to be instructed on explicitly, about these verbs? I would summarize it as follows:
The syntax of *mieru* and *mi-ru* (and *mi-rareru*) needs to be explicitly instructed. (i.e. Overt/hidden experiencer in the sentence, use/function of acceptable particles, acceptable adverbs, grammatical aspect, application of TE form)

b) The semantics also need to be explicitly taught. (i.e. level of volitional effort or attentiveness, spontaneity of perception, tangible/concrete entity versus abstract concept, realized or unrealized situation)

c) Teach them in context, including the variation of idioms and use of interjections. By singling out contexts or situations where only one of them is acceptable, and modeling the use of the verbs, we the classroom instructors may be able to clear away some of the confusion learners might have and mistakes that they are prone to make. I have included some instructional ideas to help students distinguish *mieru* and *mi-rareru*.

Of course, this list is far from sufficient, and I welcome the opportunity to make modifications based on feedback and instructional ideas I will encounter in my future research and teaching.

ACKNOWLEDGEMENT:
I would like to thank my primary advisor, Professor Wesley Jacobsen, for his helpful feedback and guidance. These made possible considerable improvements in my research and claims. I would also like to thank Professor Tsutsui, my secondary advisor, for his enlightening comments.

REFERENCES

APPENDIX:
A-1: Conversational practice to contrast volition and syntactic structures
最近、映画をみましたか。何をみましたか。誰と見に行きましたか。どこで見ましたか。もう一度見たいですか。私も見たいんですが、どこで見られますか。

A-1: Conversational practice passive meaning
いつも何歳ぐらいに見られますか。大人に見られたことがありますか。日本人に見られたことがありますか。
B: Pause a movie or show a still image and ask
何が見えますか。はっきり見えますか。ぼんやり見えますか。大きく見えますか。小さく見えますか。何歳に見えますか。どうしてですか。この人は男の人に見えますか、女の人におえますか。どうしてですか。何人（にじん）に見えますか。どうしてですか。

C: “Where is Waldo?” activity
ウォーリーはどこに見えるか？見えた！いた、いた。あった、あった。
(Ask about other characters on the page)

D-1: Vision test
視力検査（片目ずつ。メガネあり・なし、サングラスあり・なし）：「数字が見えますか。」「見えません／見えます。」「何の数字が見えますか。」

D-2: Vision test
視力範囲（ものを横に動かす）：「見えますか。まだ見えますか。」「いいえ、まだ見えます／いいえ、もう見えません（見えなくなりました）。