

**THE PLUTO AFFAIR:  
WHEN PROFESSIONALS TALK TO PROFESSIONALS  
WITH THE PUBLIC WATCHING**

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**Abstract.** This paper gives a first-hand look behind the scenes of the Press Room at the International Astronomical Union (IAU) XXVI<sup>th</sup> General Assembly in Prague that was the setting of one of the most discussed stories in 2006 – the much hated and loved International Astronomical Union resolution defining a planet. The vote passing the resolution that – as a side-effect – changed Pluto’s status to a “dwarf planet” and resulted in an unprecedented emotional argument about our Solar System. What actually happened in Prague? What were the negative and positive outcomes of the Pluto Affair? What can science communicators learn from this experience?

## **1. Introduction**

Only those readers who have spent the past year in a light- and sound-proof room will have been able to avoid hearing about the “Pluto affair” – the decision made during the International Astronomical Union XXVI<sup>th</sup> General Assembly in Prague 2006 to define what a planet is and is not. As a side effect of this decision, the former planet Pluto failed to meet the new criteria for a planet, and its status was changed to that of the newly established class of “dwarf planet”.

This paper does not discuss whether the actual outcome of the Prague vote was scientifically correct or not, or whether the wording of the resolution was bulletproof. It focuses solely on the aspects that deal with the communication process.

As the newly appointed Press Officer for the International Astronomical Union (IAU), I was tasked with, for better or worse, establishing a press



*Figure 1.* A historical moment? The vote which decided that the former planet Pluto failed to meet the new criteria for a planet, its status being changed to that of “dwarf planet”. (Photo: IAU/Robert Hurt)

office at the IAU General Assembly in Prague to communicate the results of what took place. As a result I was privileged to witness the development of one of the most publicly visible astronomical press stories of 2006 – the re-classification of Pluto from a planet to a dwarf planet.

The 2006 General Assembly of the International Astronomical Union was like no other in the history of the IAU. It was not the rich scientific programme that had been planned that caught the attention of the world’s media: discussions ranging from “Near-Earth objects” to “Galaxy evolution across the Hubble time”. It was another issue, of much less scientific weight, that was enthusiastically debated in the corridors of the *Prague Congress Center*, and that also stole most of the media limelight: how to define “planet”.

This rather non-scientific issue obviously has some strong cultural roots and hence a very high public visibility. The planet definition debate that took place at the IAU 2006 General Assembly quickly became the “hottest topic” that had been discussed at an IAU General Assembly for many years. It is naturally unfortunate that the many pieces of “real” science were rather overshadowed by the intense planet definition discussion, but contentious and emotional issues have a somewhat stronger appeal to press and public than “pure science”.



*Figure 2.* The IAU Press Office in Prague Conference Center. (Photo: IAU/Lars Holm Nielsen)

## 2. Rationale for a Planet Definition

There was no scientific definition of a planet when Pluto was discovered in 1930. The ancient civilizations thought of “planets” as “wanderers” or moving lights in the sky, and more recently astronomers have considered them simply as bodies orbiting the Sun. There seemed little reason to define more precisely what a “planet” really was, as it seemed that very little ambiguity could arise.

However, with the advent of modern telescopes, it was discovered that Pluto belongs to a vast population of small Solar System objects in the Kuiper Belt, as illustrated in Fig. 3. Such recent discoveries have prompted astronomers to reconsider the definition of what makes a planet a planet. It was therefore proposed that the term planet should be properly defined, and that the definition should reflect our current understanding of the Solar System.

Note the bewildering complexity and number of different objects in Fig. 3. Pluto is marked – one among many similar objects in our Solar System. In its striking simplicity this figure, although hard to read because of the richness of objects, demonstrate directly why it was necessary to reconsider what a planet really is.



*Figure 3.* An overview of all the known objects in the Solar System above 300 km in diameter. (Credit: Alan Taylor & Luis Murchetz [<http://www.kokogiak.com/>])

### 3. The Events

Discussions on Pluto's status had been ongoing in the scientific community for years before the General Assembly. The first time the topic really reached the ears of the public was in 2001 when the American Museum of Natural History opened their renovated exhibition featuring a "scaling walk" without Pluto. The IAU's first involvement with the issue was in 2004-2005 with the establishment of the first Definition of a Planet Committee (DPC). The DPC did a good job of uncovering the various possible ways of making a definition, but decided to not recommend one, but three ways of defining a planet. A second DPC was established in 2006 and it met 1 July 2006 and decided on a single definition to recommend to the IAU Executive Committee. The rest of July was spent on shaping the DPC recommendation into a draft resolution to be voted upon during the IAU General Assembly, which started 14 August. In July discussions between the IAU Press Officer and the Executive Committee on the public communication also took place.

In the days between 14 August and the final vote at the GA Closing Ceremony on 24 August various, at times quite intense, discussions took place, especially in Division III Planetary Systems Sciences. The original draft resolution text was changed significantly after these discussions, with the process as open and transparent to the outside world as possible. At around 15:57 CEST 24 August the voting was over and Pluto was voted a dwarf planet. A press release stating the facts was issued at 16:21 CEST. A petition containing signatures against the planet definition from about 400 astronomers, predominantly American, was delivered to the IAU President on 4 September 2006.

The last significant event to be mentioned here is that New Mexico declared 13 March 2007 for "Pluto Planet Day", and a resolution, House Joint Memorial 54, was introduced by Rep. Joni Marie Gutierrez that proposes

"as Pluto passes overhead through New Mexico's excellent night skies, it be declared a planet."

The IAU Resolution 5A implies that a planet in our Solar System (extrasolar planets are specifically not included in this definition) is a celestial body that is in orbit around the Sun and has sufficient mass to become nearly round (due to its self-gravity), and dominates its orbital zone dynamically by clearing its orbit of debris. The actual interpretation of this definition – especially whether a given body is round enough and dynamically important enough – will have to be discussed by the appropriate IAU body as each new case arises. The Resolution also defines a dwarf planet in our Solar System to be a celestial body with sufficient mass to assume a nearly round shape, but not dynamically dominant in its orbital zone.

Resolution 5A had the immediate effect that Pluto was re-classified as a dwarf planet along with Ceres and Eris (formerly known as 2003 UB<sub>313</sub>).

The new definition of a planet provoked – as predicted – loud reactions from parts of both the public and the astronomical community that still persist a year after the General Assembly. The IAU press office and the IAU president have received hundreds of letters from school children mostly containing emotional pleas to re-instate Pluto as a planet. It is interesting to see how each package of letters usually have a certain joint opinion on the topic indicating the strong influence of the teacher. It is also worth noting that all of the letters so far have been from schools in the USA.

Any decision on a topic of this magnitude and importance will inevitably generate a barrage of negative reactions. A certain opposition is, in other words, unavoidable. Judging from the ongoing writings on the topic the main resistance against IAU XXVI Resolution 5 seems to stem from a vocal minority.

#### 4. Crisis Communication

Before the General Assembly we had to choose just how open to be with the scientists, press and public during the process of deciding on the new definition of a planet.

An internal working paper written before the General Assembly predicted:

“The planet issue has the potential to become a historic event of epic proportions. It may become the hottest astronomy story of the year, or even the decade. It has the potential to change history. Seeing this as a potential historic event, do we fulfil our public duty and inform the world about the process and the decisions openly, or do we keep quiet to protect the slow and thoughtful scientific work process?”

It was already clear that we were dealing with a very special situation. Shortly afterwards the situation around the “planet definition” debate was declared a “crisis” in recognition of the possible negative effects that an improper public communication could have.

In crisis communication there are some general rules (see Christensen 2006, for more on this topic). The main thing is not to react too hastily and let the outside world dominate your decisions. Be proactive rather than reactive. Some guidelines apply:

- Communicate internally first to avoid internal confusion and enable all involved to work towards the global goal.
- Plan ahead as early as possible.
- React as quickly as possible – the timescale is usually counted in minutes and hours.

- Be available via cell phones, email etc.
- Be credible and fact-based in the external communication.
- Apply analytic working methods.
- Be transparent, open and honest.
- Be ready to compromise several times along the way in order to achieve the global goal at the end of the process (this point is notoriously difficult to accept as it goes against normal management practice)

## 5. Worst Case Scenarios

As we were planning for the “planet-crisis” we considered a series of worst case scenarios that should be avoided in the best possible way.

### 1. *Lack of communication*

If the decisions around the planet definition are to be done behind closed doors a polarized “Them and Us” situation could arise in the media: The press (and public) would be largely held outside the process and would not be properly informed, leading to a public outcry over the secrecy of discussions among senior cigar-smoking astronomers in a “closed club”.

Leading opinion-makers from cultural, arts and religious backgrounds could speak publicly against “this lab-coat nonsense”, and create a global surge of protests. Could this in an extreme situation lead to possible political intervention? Even demonstrations and violence?

### 2. *Communication that is too simplistic*

The issues around the Resolution are communicated widely, but its tentative/draft character is omitted in the public communication. In the end a resolution is not passed and the press and public feels led astray. The IAU comes out looking bad.

### 3. *Broad disagreement*

The majority of the astronomical community could disagree with the decisions of the IAU General Assembly. Could this lead to resentment and demonstrations in the community?

The majority of the public could also disagree and resist the redefinition of the “labelling” of the Solar System, and the modification of geography books. Could this lead to resentment?

### 4. *Perception of anti-Americanism*

A change in Pluto’s status could create a perception of anti-Americanism on the part of the US (as the IAU is seen by some as a predominantly European organization). Under political pressure, or spontaneously, NASA or the US planetary science community could develop its own categorization for objects in the Solar System.

The American Astronomical Society could be asked to develop poli-

cies on this and related issues that provide “American” alternatives to the European ones of the IAU. US astronomers could be lobbied (for example, by the Planetary Society) to withdraw from the IAU as individual members. An individual member or members of Congress (possibly from Arizona) could be lobbied to move for the US to withdraw from the IAU at a national level.

To generate ammunition for political lobbying, the Planetary Society could conduct a poll of the US public on the status of Pluto. The New Horizons team may perceive that a change in Pluto’s status will weaken its funding status, and lobby the IAU Executive or members for any change in Pluto’s status to be delayed (or, if it is changed, reversed). The family of Clyde Tombaugh may protest against Pluto’s change in status.

Flagstaff Observatory in Arizona could maintain its current displays and materials about Pluto and New Mexico State University may continue to refer to Pluto as a planet and Clyde Tombaugh as its discoverer. US book publishers, planetariums and generators of online content may be slow to change their current material on Pluto and its discovery, if they change it at all. They may do this spontaneously: they may also be lobbied to do so. Individual schools in the US may be slow to change what they teach about Pluto and its discovery, if they change it at all.

After considering these four hypothetical scenarios the IAU Executive Committee decided to make the process leading to a resolution as open as possible. Fortunately, none of the scenarios played out as envisaged above, although scenario four came closest with protests from parts of the American astronomy community.

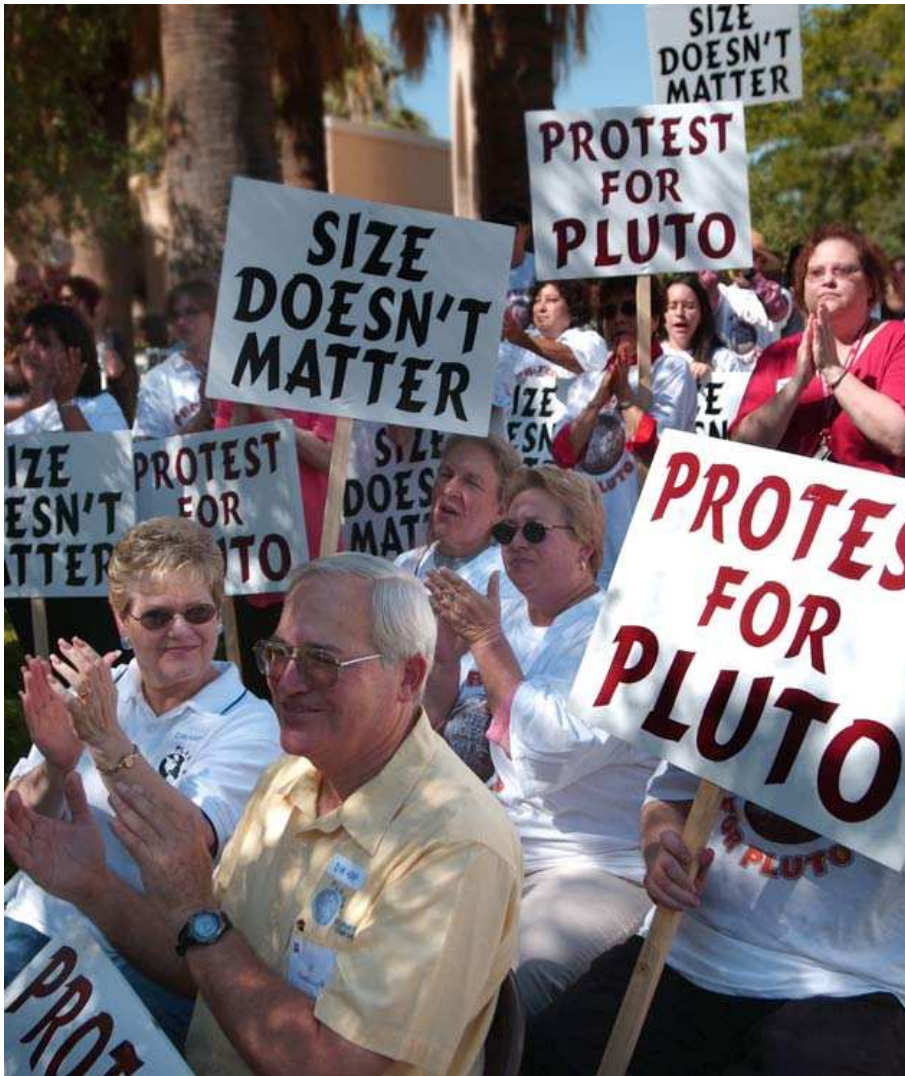
## 6. Press coverage

The interest of the media was overwhelming before, during and after the General Assembly. During the GA itself some 500 requests from media were handled by the press room that at times felt more like “mission control” than a press room. There were constantly from morning to evening one or two dozen journalists present, and very often many of the IAU key players used the good infrastructure (and coffee...) of the room to work on their strategies.

In a central location of the Prague Congress Center four boards were quickly filled with press clippings. At the peak of interest new press clippings were posted twice daily.

The ingenuity and sense of humour of the journalists were great. In such a complex story there are many different angles to take as a journalist. Some





*Figure 4.* One of the scenarios that were predicted before the General Assembly: The Tombaugh family protests for Pluto. (Photo: New Mexico State University/Darren Phillips)

examples:

- The legal angle: Does the IAU have the authority to name and classify objects?
- The emotional angle: Why change something that we learned as children, and the clearly makes many school-age children unhappy
- The political angle: Why take away the status of the only planet found

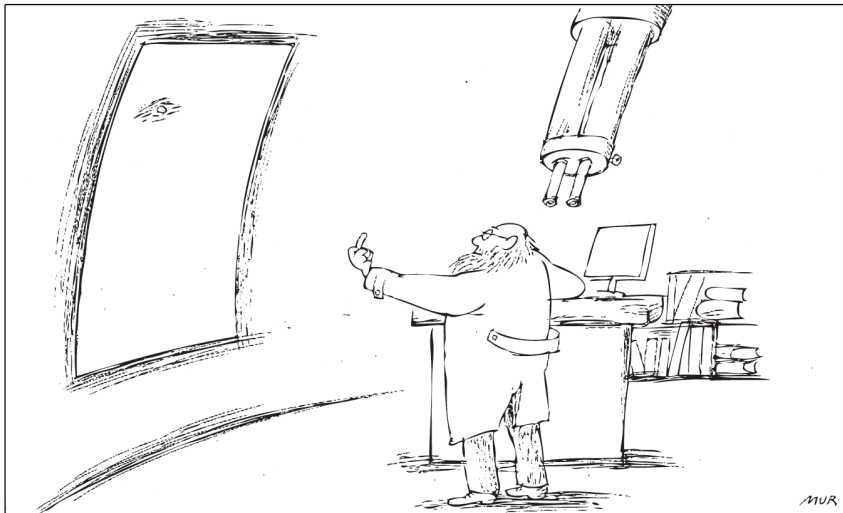


Figure 5. The press clippings boards at the IAU General Assembly. (Photo: IAU/Raquel Shida)

by Americans?

Many more entry points to the story were taken by the media. Some selected headlines from major national and international newspaper and magazine articles follows:

- Don't let new planets overwhelm your world! *The Hindu*, 18.08.06
- Chaos im Sonnensystem. *FAZnet*, 16.08.06
- Pluto identity crisis. *Daily Telegraph*, 18.08.06
- Will Pluto go Bluto? *LA Times*, 16.08.06
- Pluto may survive war of the worlds. *Irish Examiner*, 17.08.06
- Pluto: Down but maybe not out. *space.com*, 31.08.06
- With Pluto gone, which of us will be next? *Toronto Star*, 02.09.06
- Fight on to save Pluto. *Herald Sun*, 01.09.06
- Pluto: The backlash begins. *Nature*, 31.08.06
- Adieu, poor Pluto, sent to the doghouse. *The Age*, 28.08.06
- From planet to dwarf. *Life*, 29.08.06
- Conspiracy Theories. Letter in *Kuwait Times*, 29.08.06
- Pluto needs to find a new solar system. *Telegram.com*, 28.08.06
- So I'm not a planet? Says who? *Baltimore Sun*, 27.08.06
- Going 'round and 'round on defining Pluto. *Boston Globe*, 28.08.06
- Solar Shake up. *Des Moines Register*, 29.08.06



Pluto ist kein Planet

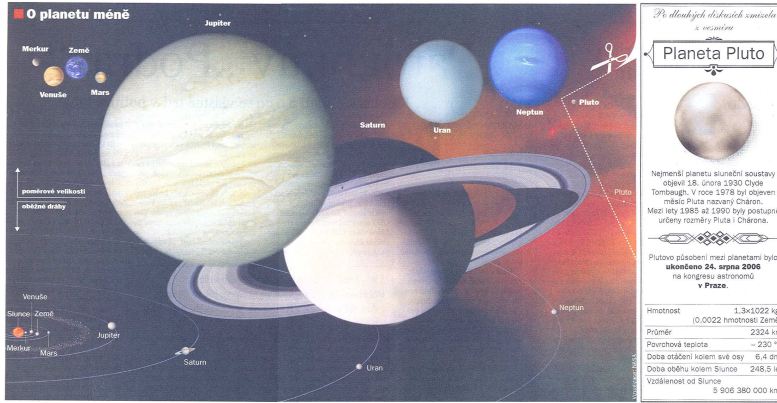
SZ-Zeichnung: Murschetz

Figure 6. One of my favourite Pluto cartoons is this one from the Bavarian main newspaper *Süddeutsche Zeitung*. (Credit: *Süddeutsche Zeitung*, reproduced with permission)

- Scientists create big bang with planet definition. *abc news*, 31.08.06
- And then there were 8 (goodbye, Pluto). *Herald Tribune*, 25.08.06
- Astronomers goofed on Pluto. *Times Union*, 30.08.06
- Good Heavens! How many planets have we? *Cybernoon*, 24.08.06
- Astronomers clash in a war of worlds. *The Associated Press*, 24.08.06
- Planets or pla-nots? *Austin American Statesman*, 24.08.06
- I ♥ Pluto. *The NY Times*, 23.08.06
- Astronomie: Die letzten Tage des Planeten Pluto. *Die Presse*, 24.08.06
- And then there were eight ... *Daily Telegraph*, 25.08.06
- ... Uranus, Neptune ... Hey, Where's Pluto? *Washington Post*, 25.08.06
- Changes in our solar system: Is trouble coming? Hawking answers. *abc news*, 16.08.06
- Get Pluto out of here! *Time Magazine*, 20.09.06
- Does size matter? *Birmingham News*, 20.08.06
- A new world order. *Courant*, 16.08.06

We saw hundreds of caricature drawings benefiting from the obvious comical aspects of seeing us humans trying to dictate the ways of the heavens and the very visible controversies of the story.

**KONEC PLUTA** Astronomové včera na kongresu v Praze rozhodli, že Pluto již není planetou sluneční soustavy, a postavili ho na roveň asteroidů. Končí sedmdesát šest let dlouhá éra, kdy sluneční soustava měla devět planet.



**Pluto končí. Už to není planeta**

*Průběh zveřejněn ve 11*

„Máte změny mají velké důsledky. Lze tvrdit, že to, co dříve bylo, se nyní stalo něčím jiným. V tomto případě jde o planetu, která byla dříve považována za planetu, ale nyní je řazená mezi asteroidy.“

Astronomové se dohodli vyhodnotit jakékoliv zřetelné, protože planetární definice vypracovali i s ohledem na velikost. Nakonec se v ní avšak je planeta jsou taková tělesa, která „vytvořila soustavu své oběžné dráhy“ od jiných těles. Vymezit planetu pro Zemi stačí jako pro Merkura či Jupiter, nikoli pro Pluto.

Nová definice je však stále nepopisuje jen tělesa, která se nacházejí v sluneční soustavě. „Zabýváme se jen slunečním systémem. Pevně jsme doufali, že dokážeme definovat planetu lépe, ale tak jsme zjevně, že je to příliš složité“, vysvětlila Burelliová. Pro více než 150 planet, které všichni objevil v jiných hvězdách, tak stále chybí přesná příjmení a definice.

**MICHAL MOČEK**

**Školy se Pluta nevzdají**

**Praha** - Ten seznam devíti planet se žáci základních škol učili sedm desítek let. Žáci: Merkúr, Venúše, Země, Mars, Jupiter, Saturn, Uran, Neptun a planetou navíc vzdálenou od Slunce byl Pluto. Po vědeckých si však budou muset žáci zapamatovat, že Pluto není planeta.

„Věci pořadí s tím přicházejí“

O sluneční soustavě se děti učí hned na prvním stupni základní školy v přírodově. O planetách jim učitelé říkají i v dalších ročnících, a to hned v několika různých předčteních, například ve fyzice nebo přírodově. Věrejší rozhodnutí valného shromáždění Mezinárodní astronomické unie, které se konalo v Praze, však znamená, že by se učební osnovy okamžitě a nějak výrazně přepisovaly.

„Není divad, abychom osnovy nějak měnili. Více prakticky nastalé přeházejí a nějakými novými poměry a také se hned kvůli tomu měnící aktualizované knížky.“

Řekl včera Pavel Peroutský, ředitel jedné ze základních škol v třináctém pražském obvodu.

„Učíte se nové věci prostředky naučí a děti spousta, že některé věci z učebnic už neplatí. Stejně to bude s Plutem. Maximálně budeme dít, že Pluto je asteroid“, doplnil.

Stěží mluví i učitelé z jiných částí republiky. „Děti se to učí v páteřích, což je na to asi nejlepší věk. Bude je to porovnání různých planet.“

Řekla ředitelka základní školy v Proseči u Skalice Jarmila Broučková.

„Může to pro ně být velmi zajímavé, když jim učitel bude vyprávět, že Pluto planetou byl a nyní není.“

Přívěsť ovšem rozhodnutí astronomů jednu změnu vyvolá. V severní části města škol spolupracovníci.

„Pluto rozhodně ze starých učebnic nebudeme. Počkáme, až se o to změně objeví podobnější informace a podle nich udáme na tabuli k této planetě doplnění.“

Řekla Jarmila Broučková.

**Astrologům změna nevadí**

Změna neramotá hlavu ani astrologům, kteří podle hvězd sestavují horoskopy. Někdy jim ministr obrany a nyní astrolog Antonín Baudyš věnuje fakt, že jemu i jeho kolegům bylo vždy úplně jedno, zda by Pluto označovali za planetu, planetku, nebo jiný vesmírný útvar.

„Pro nás je hlavní, že Pluto astrologicky funguje a my s ním při výpočtech můžeme počítat. Je nám prostě jedno, jestli je, nebo není některé vesmírné těleso označované za planetu.“

Uvedl včera Baudyš.

„Návštěv děbaty o tom, zda Pluto je, nebo není regulární planetou, probíhaly už delší dobu. Občas se mně stejně nejvíce líbí návrh jednoho profesora z univerzity v Berkeley. Ten navrhuje, že jsou to planety označené všechny velké kulovité objekty v naší sluneční soustavě.“

počet Baudyš.

A co v astrologii Pluto vlastně znamená a přestože vjeví Zlatého plováčku? Závěrem ovšem zmáčkne a valka a také hloobku poznání.

**JAN VACA**

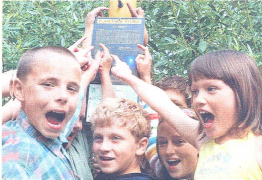
**Pes se jmenuje po planetě, říká autorka**

**Praha** (om) - Jméno Venetia Plutova nic neřekne ani věštní znaky astronomie. Přítom je tu právě tato dneš sedmadesátiletá žena, která vymyslela jméno pro devátou planetu sluneční soustavy.

Ten příběh začal ráno 15. března 1930, když jedenáctiletá Venetia z Oxfordu sešla u soula se svým dědečkem Falconem Madarem. Ten si v The Times přičel, že americký astronom Clyde Tombaugh objevil novou planetu. Jásotě namí jmeno, co bys navrhla?, zeptal se snůžky.

„Pluto“, neváhala Venetia, která si tehdy záda četla v řeckých mytách. Madaroví se návrh líbil, a tak si promítali se svým přítelem, profesorem astronomie. Profesor poslal návrh děvenky do Lowellovy observatoře, kde novou planetu objevil. I května 1930 vědci oficiálně vyhlásili jméno nové planety: Zlaté Pluto. Madam dala své vnoučce za odměnu 5 peněz.

Ta pak často slyšela, že vesmírné těleso pojmenovala po animované postavice pes Pluta z dílny Wallya Disneyho, který přišla na svět ve stejném roce. „Tad, je douším dost silně představitelství“, zaráž. Je ten pes se jmenuje po planetě, ne naopak,“ zděraznila žena v letním Plutová pro BBC.



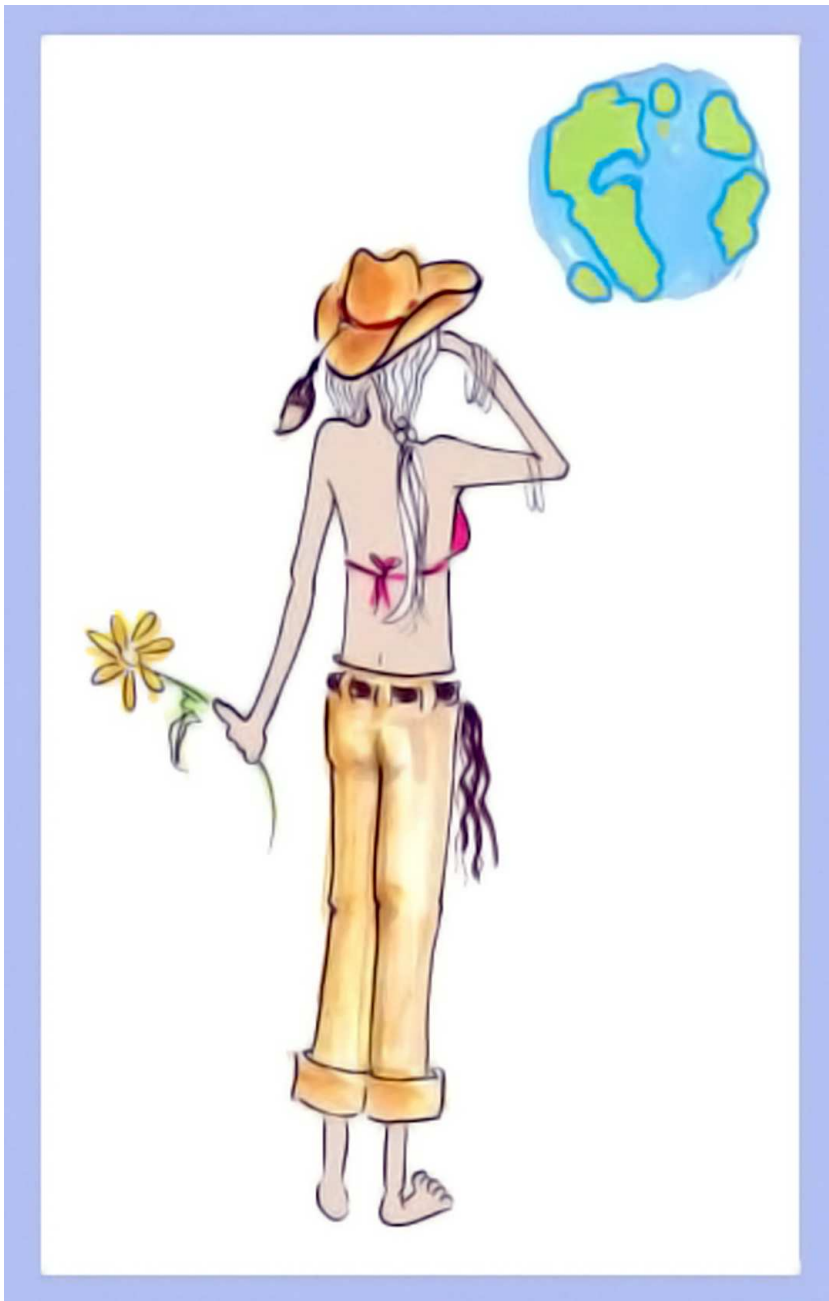
**PŘEDČASNÁ RADOST.** Na počátku prázdnin vznikla v Proseči naučná stezka, kde je Pluto ještě planetou. FOTO: MATA - RADER KALHOUŠ

Figure 7. A full page account of the Pluto affair. Note the humorous approach seen for instance in the little RIP plate for Pluto (top right), the scissors that cut Pluto from the Solar System (top right) and the crying school children at the bottom. (Credit: DNES, reproduced with permission)

**7. Public Responses**

Apart from the many letters from American school children, mostly expressing disappointment, we also received many positive letters. The press office got the following note:

“My name is Silky Sullivan, owner of the World Famous Silky O’Sullivan Bar and Restaurant on Beale street in Memphis, Tennessee, USA, home of Elvis Presley. We salute you on the discovery of the new planets and understand that new names should be of mythological origin. I would like to appear before



*Figure 8.* The press office got a note from an artist during the height of the discussions: *Dear Mr. Lindberg Christensen; I was reading the article regarding planets and I thought you might appreciate this illustration. Enjoy. Kindest regards, Connie Pecoraro, Artist-Loft.* Clearly the public were involved in the Pluto affair.



*Figure 9.* An example of the unpredictable and untraditional ways of communication during the General Assembly. At some point, at the height of the discussions, two senior – here unnamed – astronomers came into the press rooms with homemade banners advocating their view of the planet definition process. The journalists had a field day and willingly reported on this new controversy. (Photo: IAU/Lars Holm Nielsen)

the IAU to explain why this new body should be named **planet Elvis**. I have expressed my view on our local news station and in our weekly publication *The Memphis Flyer*. Response from these activities has been overwhelming. Thank you for your time and consideration.

Sincerely,  
Silky Sullivan”

The note, although the restaurant owner had misunderstood the situation slightly, can be taken as another clear indication that the Solar System for a brief period in August 2006 was very much at the forefront of people’s mind.

## 8. Lessons Learned

Many interesting lessons were learned in the press office, especially about the practicalities of setting up a well-functioning pressroom in response to the crisis, but also about the complex ways that information is transmitted from scientists to the press.

Once the IAU Executive Committee – the IAU’s highest body – had made the decision to propose the new definition of a planet the whole issue was somewhat like having two bombs waiting to explode. The first

bomb was the public reaction to changes in the worldview – adding or subtracting planets from the Solar System – and the second was the internal tension within the scientific community – due to differences of opinion and the appointment of only a few selected experts to work on the definition. Our job was to try to minimize the negative effects for the IAU and for astronomy, and to maximize the benefits from the two explosions. These explosions themselves were probably unavoidable, but we could at least make sure that the bombs were thrown in a certain direction rather than exploding in our faces.

For the first explosion – the public bomb – damage control consisted of keeping the process as open as possible and informing the press about each step of the process as it took place – including the first Resolution draft and the ongoing debate. As many as thirty journalists had already signed up weeks before the meeting and it was well known among science journalists that the definition of a planet was going to be discussed, suggesting a strong outside interest that spoke forcibly for an open communication strategy. It would not have been possible to keep the planet definition debate out of the press. By issuing press releases all the relevant information was delivered, and press and public speculation was minimized, although not completely eliminated.

It is difficult to speculate how the image of the IAU or the astronomical community might have been affected if a more closed form of public communication had been chosen. It is more than likely that the – not always constructive – messages from many prominent and outspoken astronomers would have reached the press. The open communication did avert most of the potential criticism that the planet definition process took place as closed discussions among senior astronomers.

With respect to the second bomb, the strong reaction from the scientific community was somewhat underestimated by most of the Executive Committee and the Press Officer. The majority of us also did not anticipate the significant changes to Resolution 5 that took place during the General Assembly. With 20-20 hindsight, the draft aspect of Resolution 5 could have been stressed more in the initial press release. The “inreach” aspect – sharing the draft Resolution earlier with the community (especially Divisions I and III) could perhaps have been given more emphasis, but this was difficult for two reasons:

1. The Executive Committee feared that the Resolution text would leak to the entire community and to the public, without the Executive Committee and the Planet Definition Committee having a chance to add the necessary scientific context, historical background and interpretation.
2. The Resolution itself was drafted shortly before the General Assembly, and practical considerations made it difficult to initiate discussions with

the hundreds of members of Division I and III (collecting emailing lists etc).

## 9. Outcome

The planet definition affair has definitely had some negative effects. Astronomers and scientists in general have been publicly portrayed as being in disagreement, arguing and, at times, even being childish in their discussions. Although many will say that this was very negative for the astronomers and for astronomy itself, the positive side of this is that astronomers and scientists have appeared as human beings and far from their usual “lab-coat” image. The IAU has also been publicly accused of being a body that only represents a fraction of astronomers.

In my opinion the positive effects, however, outweigh the negative by far. One of the most important outcomes of the public communication from the General Assembly is that the public today has a somewhat better knowledge of our Solar System, the IAU and its mission as the authority on fundamental astronomical issues. The enormous public interest in the planet definition story is perhaps best illustrated by the large number of cartoon jokes/caricatures appearing in the international newspapers. It is the first time in many years to my knowledge that any scientific topic has penetrated so deeply into the public conscious. The effect of this is very significant. Scientific issues are usually notoriously difficult to get on the front pages (although astronomy usually stands a better chance than most other sciences). The value of this is enormous – despite the unavoidable negative effects described above.

For once, a large fraction of the demographic segment of people inattentive to science was exposed to science. A small-scale poll among friends and family found that everyone had heard of the Pluto story and most even offered an opinion about it. This is a very important consequence and should not be underestimated.

In terms of public communication it is vital that the current high awareness of the Solar System is used to promote scientific issues. There is great potential to use this debate to inform the public about the Solar System – that it is still in formation, about debris, about potentially hazardous near-Earth asteroids, about dwarf planets, Kuiper Belt objects, trans-Neptunian objects, planets and more. This is a great opportunity to teach that science is not static, and that when new discoveries are made, science must evolve. And that astronomy as a science, although often perceived as “old”, still offers surprising discoveries.

In the longer term the increased awareness of the IAU due to the “Pluto Affair” can be used to further interest in the International Year of Astron-



omy 2009.

The re-classification of Pluto as a dwarf planet should not be seen as a demotion. Pluto is now the prototype for a whole new class of objects. Pluto is a swan, not an ugly duckling, and we should all celebrate that it has finally been placed in a class of its own. After all Pluto is still Pluto, and does not care what we call it.

### **Acknowledgements**

I would like to thank the pressroom team for their dedication, hard work and good spirits during the General Assembly 2006: Helen Sim, Raquel Yumi Shida, Lars Holm Nielsen, Nadja Wolf, Pedro Russo, Robert Hurt and Gordon Squires. An internal report on the press office experiences from the GA is available in Christensen et al. (2006). I would also like to thank the Executive Committee and the Definition of a Planet Committee, especially Richard Binzel, for the incredible amount of hard work they put into the planet definition debate and the various topics dealing with communication. ESO and the ESO Public Affairs Department deserve special thanks, as they partly sponsored the loan of a large fraction of the pressroom equipment and partly sponsored and arranged the transport of the IAU exhibition at the General Assembly.

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<sup>1</sup>[http://www.spacetelescope.org/about/further\\_information/techdocs/html/iau\\_po\\_report.html](http://www.spacetelescope.org/about/further_information/techdocs/html/iau_po_report.html)